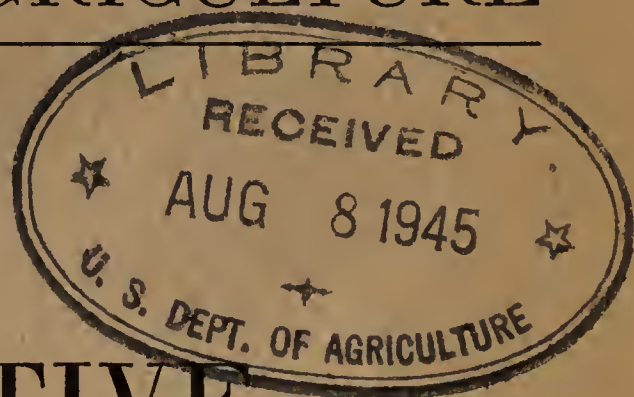


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UNITED STATES
DEPARTMENT OF AGRICULTURE



COOPERATIVE
EXTENSION WORK
1924

WITH 10-YEAR REVIEW



OFFICE OF
COOPERATIVE EXTENSION
WORK

JUL 27 1945

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¹ Revised to Mar. 1, 1926.

UNITED STATES
DEPARTMENT OF AGRICULTURE

COOPERATIVE
EXTENSION WORK
1924

WITH 10-YEAR REVIEW



PREPARED BY
THE OFFICE OF COOPERATIVE
EXTENSION WORK

C. B. SMITH, Chief



GOVERNMENT PRINTING OFFICE
WASHINGTON

1926

COOPERATIVE EXTENSION WORK, 1924, WITH 10-YEAR REVIEW ¹

Prepared by the Office of Cooperative Extension Work

C. B. SMITH, Chief

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INTRODUCTION

This is the tenth annual report on cooperative agricultural extension work. It has been thought desirable to render a report, not only on some of the more outstanding achievements of 1924, but to combine with them, where practicable, some of the accumulated results of the work of the whole 10-year period during which cooperative extension work has been carried on under the Smith-Lever Act, 1915 to 1924, inclusive. This is done in order that a broader view may be obtained of what has been accomplished and of the general trend of the work over its first 10-year period in relation to American farm life.

The nucleus of the American agricultural extension system is the Federal act of 1914, providing for "Cooperative agricultural extension work." This law, popularly known as the Smith-Lever Act, obligates cooperation between the State agricultural colleges and the Federal Government in carrying on extension work in agriculture and home economics on farms and in farm homes throughout the United States. The law provides \$10,000 of Federal funds outright for each State in support of the work. It then provides \$4,100,000 additional funds to be allotted to the States in the proportion which the rural population of each State bears to the total rural population of the United States, provided that in each State a like amount is made available from State, college, county, local, or individual sources to be used for the same purposes as the Federal funds. The extension work conducted with Federal and State funds thus provided, according to the wording of the act, is to be carried on in such manner as may be agreed upon by the Federal Secretary

¹ Funds for extension work are appropriated for fiscal years ending on June 30, whereas extension agents are required to prepare their reports for calendar years. For this reason, statements of funds expended are given for the fiscal year ended June 30, 1924, and results of work done for the calendar year ended December 31, 1924.

NOTE.—This report on cooperative extension work has been written and printed in accordance with a provision of the act of Congress of March 4, 1915, entitled "An act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1916." (38 Stat. L., p. 1110.)

of Agriculture and the officers of the State agricultural colleges receiving the benefits of the act.

The Smith-Lever Act contemplates the continuance of the practice, already widespread at the time of its passage, of locating men and women demonstration agents in each agricultural county in the United States to show the farmer on his own farm and the farm woman in her own home improved methods, such as selecting seed, feeding and managing livestock, fighting insect pests, and making the home more comfortable and attractive. It is the intent of the act that these agents aid farmers and their families, including farm boys and girls, in putting on demonstrations designed to show how to apply improved methods under local conditions.

SINGLE EXTENSION SYSTEM ESTABLISHED

When the Smith-Lever Act went into effect, the land-grant colleges were carrying on considerable extension work with their own money. The United States Department of Agriculture, likewise, was spending nearly a million dollars a year for extension work independent of the land-grant colleges. Since the Smith-Lever Act obligated cooperation between these institutions in carrying on part of the extension work, the Federal Secretary of Agriculture proposed to the land-grant colleges that they pool all the funds available to the college for agricultural extension work in each State and create a single extension division at the college, with an extension director at its head, this director to be appointed by the college but acceptable to the Federal Department of Agriculture. The secretary agreed, further, if this were done, to pool with the college all funds of the Federal department available for extension work in the State and to carry on all department extension work within the State under the supervision of the State extension director.

The Smith-Lever Act itself and this voluntary pooling of interests in extension work by the Federal and State Governments established a new principle in Federal and State cooperation. It created a single system through which all the extension work of both the State colleges of agriculture and the United States Department of Agriculture was to be conducted. After 10 years of trial, the plan adopted seems to be working out satisfactorily both to the States and to the Federal Government.

FARM PEOPLE PARTNERS IN EXTENSION

Further, the Smith-Lever Act not only made partners of the Federal Government and the State colleges of agriculture in carrying on extension work, but the act was drawn broadly enough so that the farmers and farm women themselves could be admitted as partners with the county, State, and Federal Governments in planning and financing the extension work carried on in each community. That farmers and farm women have been made essentially partners with the Government, sitting down with the Government agents around a common council table and together working out plans for extension work in the community, looking toward the improvement of the farm, the home, and the neighborhood may be regarded as one of the outstanding accomplishments of extension during its first 10-year period under the Smith-Lever Act. (Fig. 1.)

The agents of the cooperating county, State, and Federal Governments and the people of each farming community where extension work has been carried on have together made analyses of local conditions, agreed upon what ought to be done, what work should be taken up during the year, what demonstrations put on, how many, who should put on these demonstrations, what reports should be made, what help from the college was desired and what could be rendered, how the work should be financed, what agents employed, and like matters; and, when an understanding on all these matters has been reached, the administration of the work has been entrusted to the State college of agriculture.



FIG. 1.—Community meeting at which local people have gathered to discuss problems of common interest with the county extension agent. Through such meetings community action and betterment are encouraged, more people are reached, and larger interests are benefited

FARM OUTLOOK BROADENED

Extension work has contributed during the past 10 years to the broadening of the outlook of the farmer and farm woman. It has been said of old that the man who works with his hands—the farmer—is rarely chosen to sit in the council of the wise or the assembly of the Nation. His mind has been on his cattle and his plow rather than on problems of the community or matters of State; and the mind of the farm woman, on her children and homely household affairs. Extension work, however, as developed during the past 10 years, has made the farmer and farm woman conscious both of the value of technical efficiency on matters of the farm and home and of the need for seeing the larger things of the community and the State. It has expanded their interests and vision, making them partners with Government in the larger as well as the smaller things of the farm, the home, the community, and the State.

FUNDS AND STAFF

When the Smith-Lever Act went into effect July 1, 1914, and was accepted by the States, the State and Federal Governments were spending approximately \$1,600,000 in the conduct of various lines

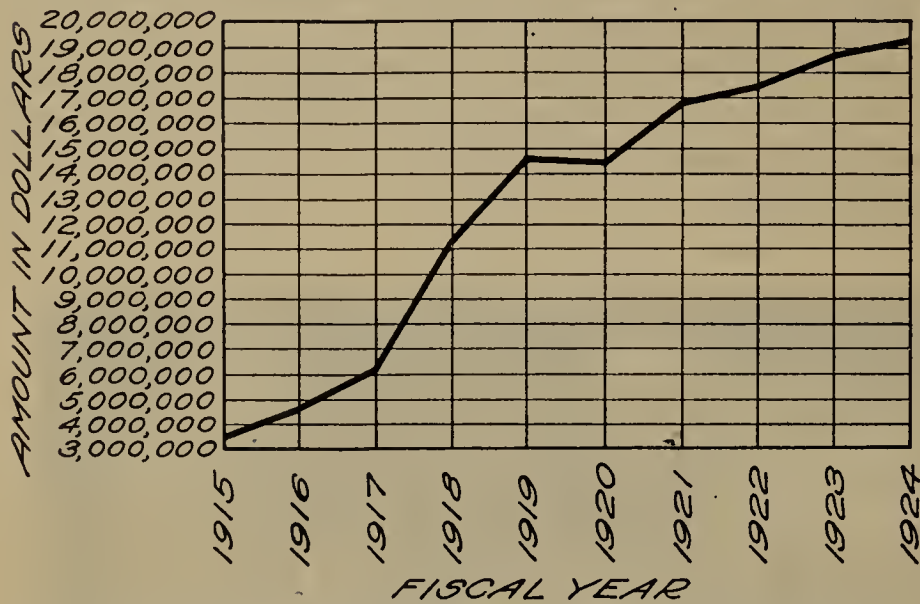


FIG. 2.—Funds from all sources expended for cooperative extension work in States during 10 years ended June 30, 1924

of extension work in agriculture and home economics. In 1924, the amount expended for extension work had increased to \$19,394,639, of which \$19,082,025 was expended in the States and \$312,614 in connection with the activities of the Federal office in Washington, D. C. About 38 per cent of these funds came from Federal sources, 27 per cent from State sources, and 35 per cent from county sources (figs. 2, 3, and 4).

The extension system, as developed during the past 10 years, has been predicated on placing a technically trained and practically minded agricultural agent and home demonstration agent in each rural county of the United States where there is sufficient farming population to justify the expenditure required, and a boys' and girls' club agent and a negro agent in counties where there is a demand for the service of such agents and where sufficient funds are available. These agents make their homes in the county in which they work and have a centrally located office usually equipped with files, record facilities, telephone, and other office equipment. An automobile for field work and needed clerical assistance are frequently provided for by the county authorities. The agents systematically visit among the farming people of the various communities in their counties, suggest demonstrations and improvements on the farms and in the homes in the communities visited, and are consulted by farmers

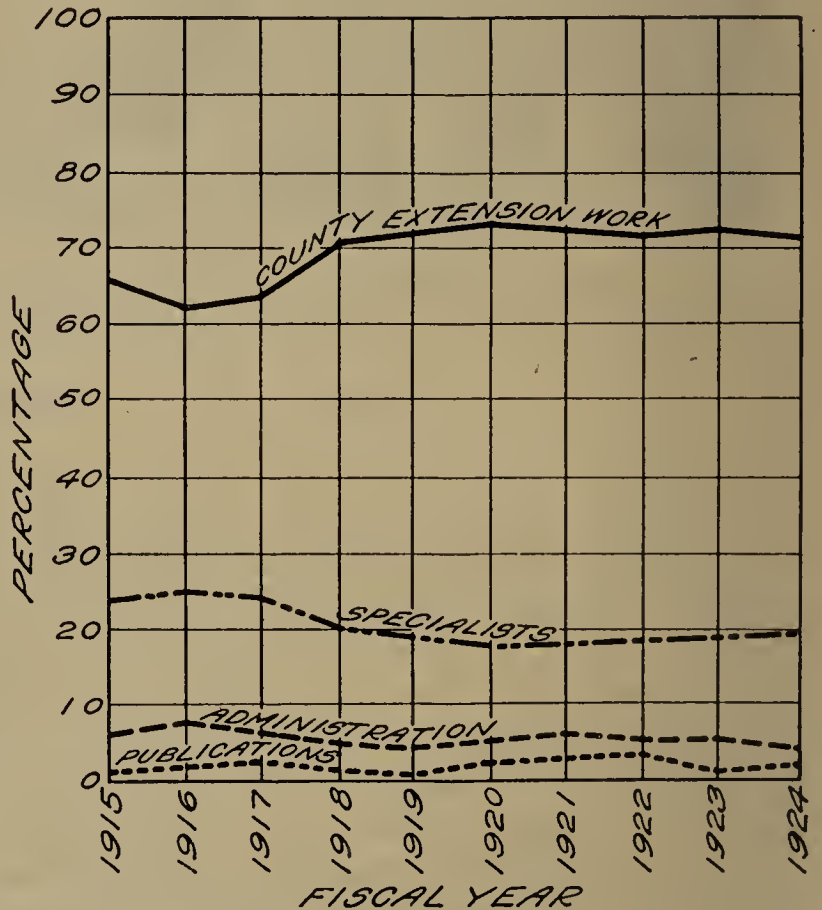


FIG. 3.—Percentage of extension funds expended in States by lines of work, 1915-1924

and members of their families in the office or over the telephone. These county extension agents serve as a connecting link and as a clearing house for information between the State colleges of agriculture, the Federal Department of Agriculture, and the local people.

The county extension agents are called upon to handle a great many matters of importance to farmers and farm women, some of which require highly specialized training. To meet this situation, a corps of extension specialists in such subjects as agronomy, horticulture, farm management, foods and nutrition, textiles and clothing, and marketing is usually maintained, with headquarters at the State agricultural college, to help the county extension agents with their more specialized problems. Supplementing the State specialists is a small corps of Federal extension specialists, who carry to the States matters which the Federal Government has ready for extension and who act as carrying agents and a clearing house of information for all the States. It is, likewise, through these various county, State, and Federal extension agents that the State and Federal research forces are kept advised as to the needs of the farmers for additional research.

To assist these field agents, most State colleges of agriculture have developed strong editorial departments to prepare instructive publications and to keep the public informed of extension progress through the press. Such studies as have been made indicate that at a very

reasonable cost well-prepared bulletins, reports, and press information increase the effectiveness of extension work 20 to 25 per cent.

The extension staff in 1914 included 881 county agricultural agents, of which number 678 were in 15 Southern States. Of the latter, 38 were negro agents working with negro farmers and farm boys. There were 349 home demonstration agents, all of whom were located in the Southern States. These agents gave about a third of their time to the work, their main activity being the promotion and instruction of girls' canning clubs. Of these home demonstration agents, 12 were negro agents devoting themselves to the problems of the negro farm family. The various States employed approximately 221 full and part-time specialists, most of whom were in the Northern and Western States. In addition to the above State and county field forces, there were various supervisors for the several lines of work.

On June 30, 1924, the cooperative extension personnel had grown to 2,251 county agricultural agents and 89 assistant agents well distributed throughout the States (fig. 5). Of this number, 166

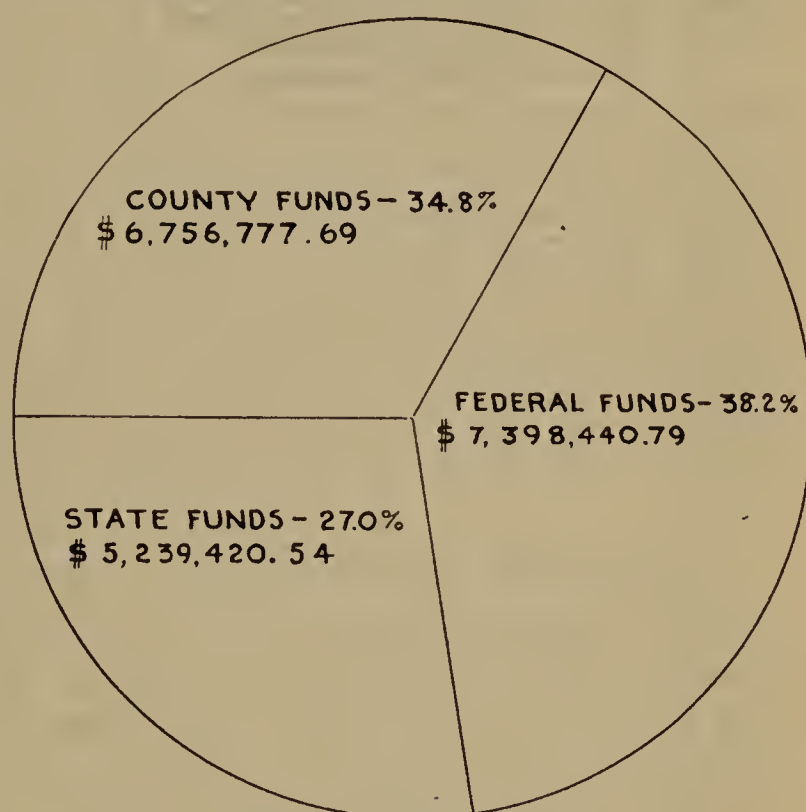


FIG. 4 — Sources of all funds used for cooperative extension work during the year ended June 30, 1924

were negro agents. There were 946 county home demonstration agents and 18 assistant agents. The larger number of home demonstration agents were located in the Southern and Eastern States. Of these home demonstration agents, 101 were negro agents located in the Southern States. In 1924 all home demonstration agents were giving practically full time to the work. There were also 135 county boys' and girls' club agents and 7 assistant club agents. The specialists on full and part time had increased to approximately 850, or an equivalent of 765 employed on a full-time basis. These field

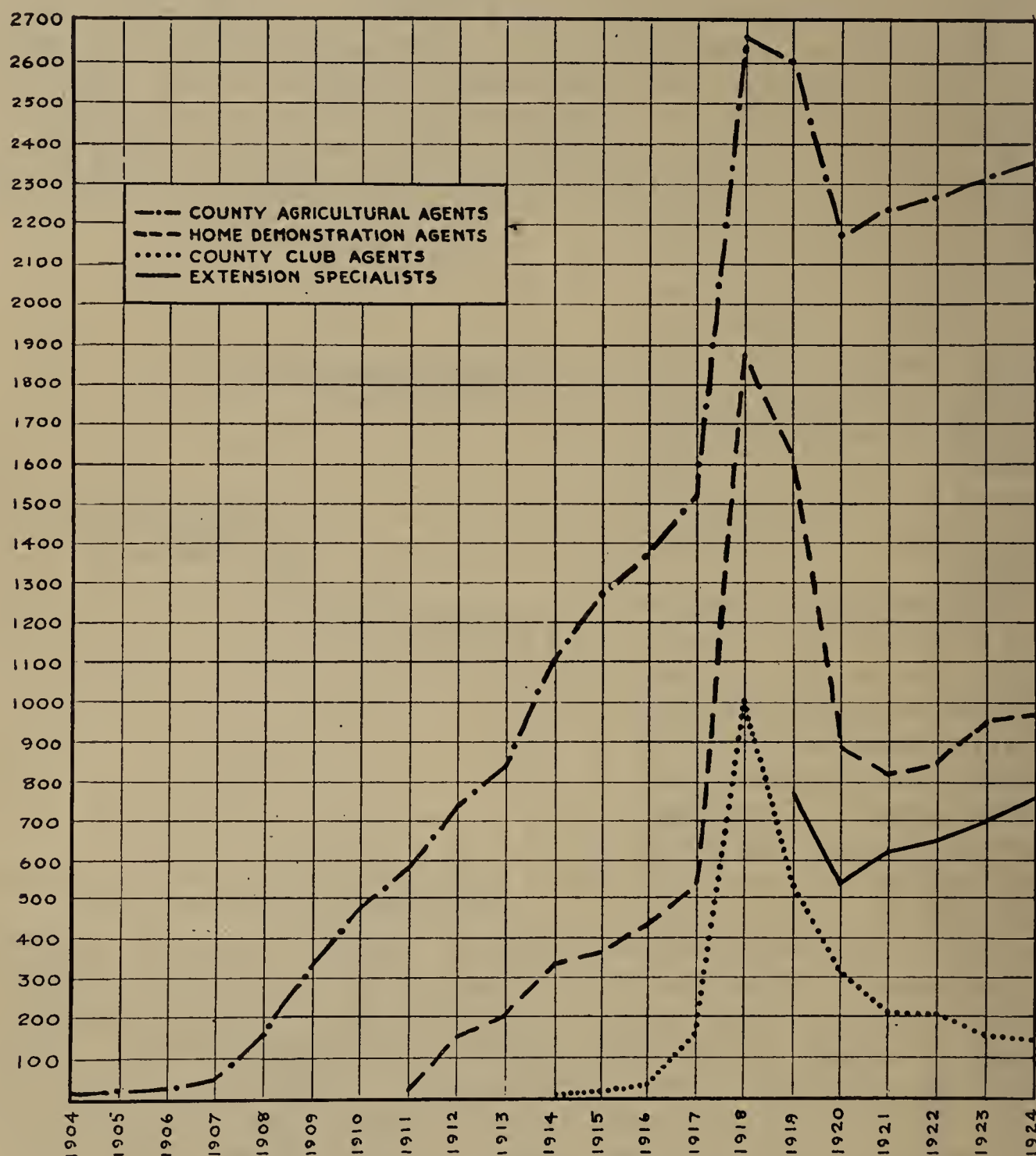


FIG. 5.—Comparative growth in the number of county extension agents and of State extension specialists (full-time basis)

forces, together with the extension directors and supervisory officers, constituted a total technically trained extension force in agriculture and home economics in the United States of about 4,764 people.

With county agricultural agents in about three-fourths of the rural counties of the country, county home demonstration agents in one-third of the counties, and boys' and girls' clubs enrolling but 1 in 22 of the rural boys and girls 10 to 18 years of age, the cooperative extension system can not be said to have been more than half completed on June 30, 1924, the end of the first 10-year period. However,

as no county extension agent or assistant is placed in a county without county or local financial cooperation, the present development of the extension system within the counties can be regarded as a direct measure of the popularity of this work among farming people.

STATUS OF EXTENSION AGENTS IMPROVED

In 1914, many of the county agricultural agents and home demonstration agents were men and women who had been successful farmers and home makers but who had not had professional training. The fact developed early in extension experience, however, that farmers soon reach the point in utilizing extension aid where they are satisfied only with the latest facts and best information. This resulted in the employment of technically trained extension agents in increasing numbers as cooperative extension expanded. As a result, by 1924, about 90 per cent of the agents employed were technically trained in an agricultural college or like institution, as well as having had practical experience, and such training has become practically a requisite in the employment of new extension agents.

The turnover in the county extension forces averages about 20 per cent a year. Salaries for county agricultural agents in 1924 ranged from \$1,450 to \$5,500; for home demonstration agents, from \$1,150 to \$3,540; and for boys' and girls' club agents, from \$1,200 to \$5,000. The average salary for county agricultural agents was \$2,730; for home demonstration agents, \$2,146; and for club agents, \$2,113. The extension specialists, likewise, are practically all technically trained men. Their salaries in 1924 ranged from \$1,690 to \$4,600 per annum, averaging about \$2,770.

DEMONSTRATIONS THE BASIS OF EXTENSION TEACHING

The enactors of the Smith-Lever Act had in mind teaching primarily by means of demonstrations. For this reason only 5 per cent of the funds were made available under the act for the printing and distribution of publications. Likewise, by mutual agreement between the land-grant colleges and the Federal Department of Agriculture, Smith-Lever extension funds during the past 10 years have not been used for financing such lines of work as correspondence courses or farmers' institutes. The use of Smith-Lever funds for agricultural trains is prohibited in the act itself. The emphasis in extension work, therefore, has been placed, not on extension contact through correspondence or lectures, but through a well-developed local county system of extension education actually showing people on their own farms and in their own homes, in the community, and at the market place how to apply new knowledge or do things in a better way (fig. 6).

Thus, in 1924, there were conducted under the supervision of county extension agents 645,488 adult demonstrations by farmers and farm women and 489,262 junior demonstrations by farm boys and girls enrolled in agricultural and home-making clubs. This is a total of 1,134,750 demonstrations involving the element of time, records of the work, and reports on the work done. In addition to these demonstrations, 417,074 meetings attended by 7,372,600 people were held at which field and home demonstrations were held to make clear their benefits to the local community. To draw at-

tention to the results of these demonstrations, local exhibits were made of the products grown or produced in the demonstrations in 5,637 communities.

EXTENSION EFFORT EFFECTIVE

No satisfactory methods of measuring the results of extension teaching have been worked out. A few facts and some presumptions can be given. Four intensive surveys were made in four different States in 1924, in which every farmer in certain areas was approached and questioned, 3,954 records being thus obtained. From the surveys it was found that the people on practically 75 per cent of the farms visited, or three farms out of every four, had made some change for the better in either farm or home practice as a result of 6 to 10 years of



FIG. 6.—Field meeting to inspect demonstration in growing soy beans in corn. Demonstrating to farmers and farm women how to do things in a better way is the foundation of cooperative extension work. During 1924, 1,134,750 such demonstrations were conducted by farmers, farm women, boys, and girls under the supervision of county extension agents

systematic extension work in the county. On the average, not only 1 change was reported, but between 3 and 4 changes in practices per farmer or, to be exact, an average of 3.4 changes.

The practical test of extension work is whether or not the farmer puts into practice the methods or improvements recommended by extension workers. If he does not change his practice little or no advance has been made. The data obtained from the limited surveys referred to above show that, in sample areas of four States, three out of every four farmers on the average have changed and improved their farm practices since the inception of extension work in their respective counties.

FARMERS ENCOURAGED TO WORK TOGETHER

Probably one of the most significant results of extension work from the standpoint of American country life has been that farm folks have learned to work and to act together in many sections where such cooperation previously had not existed. Many of their problems are community rather than individual. Extension work has taught cooperation—cooperation in marketing, in buying, in procuring better stock, in program-building, in carrying on extension activities, in putting on automobile tours, in holding field meetings, in building community houses and centers, in developing farm organizations, and in promoting legislation affecting agriculture.



FIG. 7.—Local leaders being instructed by the clothing extension specialist in the principles of clothing construction. Volunteer local men and women leaders after receiving intensive training in a subject return to their communities and act as local sources of information, give demonstrations or talks before groups of people, serve as chairmen or members of extension committees, and assume responsibility for passing on to others the information they have received and for procuring records of results accomplished

DEVELOPMENT OF LEADERSHIP HELPFUL

There were 182,917 farm men and women in 1924 who voluntarily joined with the paid extension forces in undertaking to improve agricultural and home practices in rural America (fig. 7). These men and women acted as demonstrators themselves, served as chairmen or members of extension committees in their communities, and gained recognition as local leaders. It is the belief of many extension workers that the development of this rural leadership from among the farming people themselves has been one of the most helpful and important results of the whole 10 years of cooperative extension work for the reason that when a local leader is developed, permanency of effort in that community has been provided for and the work can be expected to go on without serious interruption even if the county extension agent temporarily drops out.

EXTENSION WORK STIMULATING TO THE MIND

Extension work, as it has been conducted during the past 10 years, has been stimulating to the mind. It has helped farming people to think about the business of the farm and to think in terms of action. The fact that 49,464 community programs were developed in 1924 in which farmers themselves, cooperating with extension agents, analyzed the needs of their communities, devised remedies, selected 182,917 local leaders, determined upon 1,134,750 demonstrations, carried them to completion, and reported the results, shows that some thinking to a purpose was done. When it is understood that the extension agents are teaching more and more not by a telling, but by a drawing-out process and that the farmer himself is being encouraged to explain the demonstration, conduct the meeting, make the report, write the letter, solicit membership, explain extension work, and handle the funds, it is readily seen that the best pedagogical practices are being used and that men are being stimulated to think, and think in terms of action. The first essential to the development of good farming, high standards of living, and good homes is thinking men and women to further such development. Extension work is finding and developing such people.

ORGANIZATIONS AID EXTENSION TEACHING

During the past 10 years nothing has brought agriculture more prominently before the public than the substantial record of accomplishment of the farmers' clubs, local extension groups, and kindred organizations which cooperative extension has developed and promoted. Extension workers, although emphasizing the demonstration, also have emphasized the value of teaching through groups. Sometimes these groups have been found already organized, but more often they have been created to aid extension teaching. Thus, in 1924, 38,120 junior and 28,010 adult extension clubs with a membership of 510,355 juniors and 557,347 adults actively cooperated in extension work. County councils, composed of representatives of all the agricultural organizations of each county, have been organized in hundreds of counties in the Southern States. The number of cooperative marketing associations, the organization of which was encouraged by extension agents, runs into the thousands. The purchases made through 1,829 of the organizations in 1924 amounted to \$27,300,385 and the sales, to \$186,170,433. County organizations, the chief function of which is the furtherance of cooperative extension work, have been organized in more than three-fourths of the States in the Union.

The American Farm Bureau Federation, a national organization of farm men and women, owes its origin, at least indirectly, to cooperative extension. This federation, along with other older farm organizations, has been a power in National legislation and in stimulating the economic phase of extension work, resulting in a number of strong interstate marketing associations. Independently, also, the extension service has promoted literally thousands of shipping, purchasing, and loan associations. In this work farmers have learned to cooperate in a large way, and their vision has thereby been expanded beyond farm, community, and State boundaries to the Nation and to the countries of the world competing in agricultural

production. As a result of extension teaching, the farmer in a larger degree requires and is demanding a knowledge of world conditions; and, through the cooperative extension service, aided by the Federal Bureau of Agricultural Economics and the land-grant college departments of agricultural economics, he is getting such knowledge.

ECONOMIC DEVELOPMENTS FAVORABLE

Cooperative extension work, carrying information suited to practical and immediate application to the American farm and farm home, happily had its inception at the beginning of a new era in American farm life distinctly favorable to its growth and spread of influence. Coincident with the establishment of this system of rural education was the development of good roads and the automobile, which widened the horizon of the farmer and his family far beyond their immediate neighborhood. Both of these, too, greatly facilitated the growth and spread of influence of cooperative extension work in farm and farm-home practice. With the aid of good roads and the automobile, a trip of 100 miles is accomplished as easily by the individual farmer as was one of 15 miles before the advent of these agencies. In many sections the cultural and recreational advantages of the city have been made as readily available for practical purposes to the farmer living 50 miles away as to the city dweller himself. Good roads and the motorization of freight as well as passenger traffic have also changed to a marked degree in certain sections the systems of farming and the accessibility of markets for farm products.

The first 10-year period of cooperative extension work under the Smith-Lever Act, further, witnessed marked progress in making available at moderate prices modern heating, lighting, water-supply, and sewage systems suited to the farm home. This development has contributed largely to the great comfort of the farm home and to making home life more attractive to the young people. It fitted in admirably with the cooperative extension program for the farm home, of which a leading phase was the introduction of home conveniences, thus eliminating unnecessary household drudgery and making farm-home life attractive.

In this period, the motion picture and the radio came into popular use, lending their influence to annihilating the isolation of the country neighborhood. They brought the farmer and his family into intimate daily contact with world events, with music and art, with the life and scenes of distant countries, and with the political, religious, and intellectual leadership of the Nation. Both of these agencies, although their extension adaptation is in its infancy, promise in themselves to become most helpful mediums in the further spread of extension education.

WHAT HAS BEEN ACCOMPLISHED IN THE FIRST DECADE

In this period apparently so opportune for the growth and spread of influence of cooperative extension work, what can it claim to have accomplished? What is its significance in American life? What will be the future trend of its influence? We may brief some of its outstanding results:

(1) Cooperative extension work has vitalized the State colleges of agriculture and the United States Department of Agriculture as agencies of practical helpfulness for a large majority of the farming people of the country.

(2) Cooperative extension work has improved materially the farm and farm-home practice of the whole country. It has brought about the establishment of more profitable systems of growing and marketing farm products in many large agricultural areas.

(3) Cooperative extension work has been responsible for a rapid and general development of rural organizations. It is fast establishing the habit of group thought and action in country neighborhoods.

(4) Cooperative extension work has established the self-conducted demonstration by the pupil as the method of teaching most applicable to the mass of people. The demonstration, likewise, has proved to be the most convincing basis for printed, oral, or pictured appeal to those who can not witness or take part in the demonstration itself.

(5) Cooperative extension work has brought about among country people, both young and old, a pride in farm life and in extension association and achievement, that is materially aiding in rural improvement and progress. The finding of capable, unassuming men and women on the farms and encouraging them to become leaders of movements and of men and women in their communities, counties, and States has been a distinctive extension accomplishment to this end.

SIGNIFICANCE IN NATIONAL LIFE

What is the significance of cooperative extension work in American life? In a period when the physical, mental, and social horizon of the farmer and his family has expanded beyond all previous experience and when, on account of the World War, his standard of living was suddenly inflated and then, as suddenly, left without economic foundation, cooperative extension work came into country life as a steadying yet progressive influence. It aided the individual farmer in adjusting himself to the practical requirements of the economic situation and stabilized agriculture, still recognized as the foundation of national business activity and prosperity. It stimulated and made possible constructive group thought and action in the country neighborhood. It widened the horizon of the farmer beyond his plow and cattle and his immediate community to the county, the State, the Nation, and the countries of the world, giving him outlook, vision, pride in occupation, and ability to contribute intelligently and materially to solving the problems of the day.

TREND OF INFLUENCE

Judging by the experience of the past 10 years, the future trend of the influence of cooperative extension work will be toward:

(1) Increasing group thought and action as a habit in country neighborhood life.

(2) Encouraging conscious effort on the part of country people to retain and capitalize the best features and attractions of country life and to work out for themselves the soundest way in which to make available to their young people and to themselves, the best in education, recreation, and social life which the country and town afford.

(3) Expanding boys' and girls' club work and developing supplementary agencies that will make the practical influence of extension association, teaching, and training as available as public-school education to all country boys and girls.

(4) Furthering opportunities for the economic and social development of the farm woman that will place her on a more equitable footing with the modern, wage-earning woman of the city in standards of living and in opportunities for community activity and personal improvement.

(5) Stimulating ambition for a more satisfying home and neighborhood life on the part of the farmer and his family based on healthful and sensible tastes and ideals and on a community of thought, appreciation, and action.

ECONOMIC RESULTS ²

DISTRIBUTION OF EXTENSION ACTIVITIES

The proportion of time spent by extension workers on the various subject-matter lines of work furnishes a reasonably good picture of the distribution of extension activities (fig. 8). The percentage of

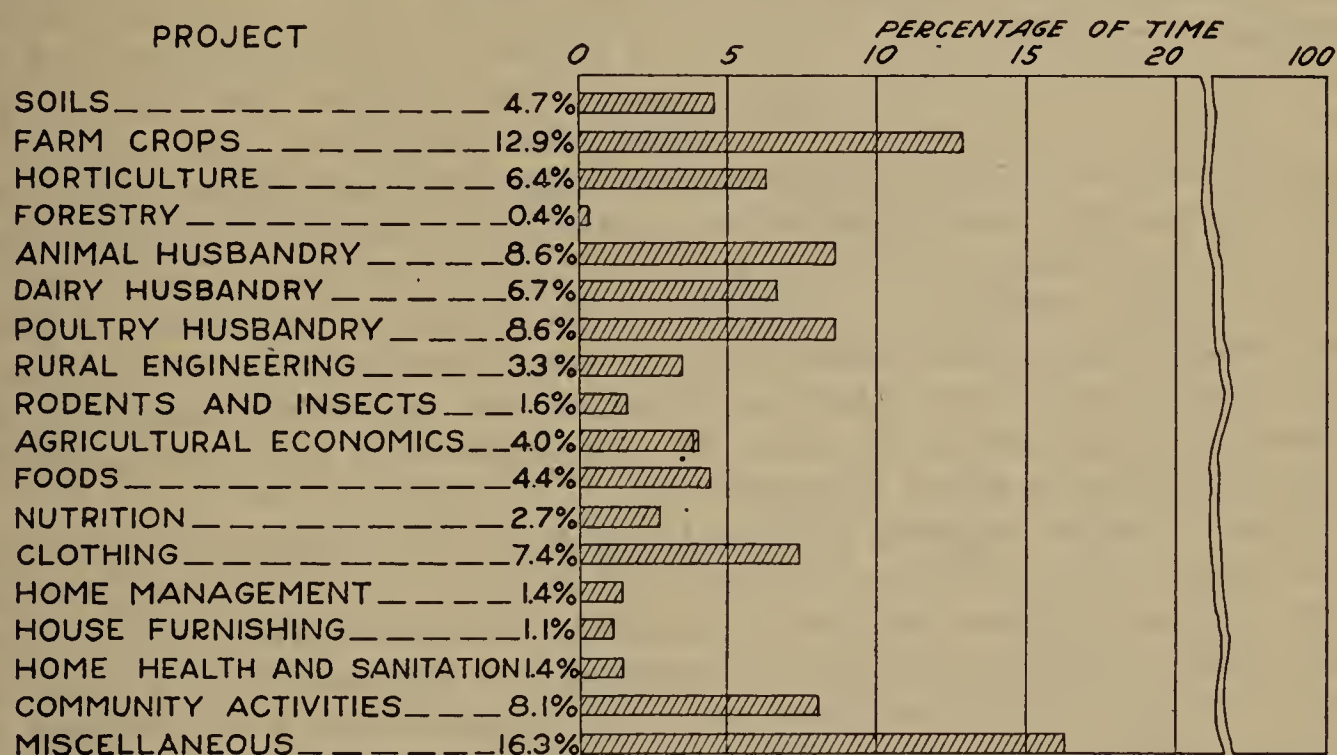


FIG. 8.—Percentage of agents' and specialists' time devoted to projects in 1924. Only field work of specialists as reported by county extension agents is included

time devoted to the various lines of work by county extension agents and specialists during 1923 and 1924 is given in Table 1. As will be noted, there has been little change in emphasis in these two years. The large decrease in miscellaneous activities in 1924 is owing largely to more accurate reporting and to a better organization of the work.

² Table 4, p. 96, contains a complete statistical summary showing in detail the activities and accomplishments by projects for each group of county workers assisted by subject-matter specialists. The number of agents reporting the various items is also given for comparison.

TABLE 1.—Percentage of agents' and specialists'¹ time devoted to projects, 1923 and 1924

Project	1923	1924	Project	1923	1924
	<i>Per cent</i>	<i>Per cent</i>		<i>Per cent</i>	<i>Per cent</i>
Soils.....	2.4	4.7	Agricultural economics.....	4.3	4.0
Farm crops.....	13.9	12.9	Foods.....	6.3	4.4
Horticulture.....	5.6	6.4	Nutrition.....		
Forestry.....	0.2	0.4	Clothing.....	6.4	7.4
Animal husbandry.....	8.5	8.6	Home management.....	2.0	1.4
Dairy husbandry.....	5.5	6.7	House furnishing.....		
Poultry husbandry.....	7.9	8.6	Home health and sanitation.....	0.9	1.4
Rural engineering.....	2.0	3.3	Community activities.....	3.4	8.1
Rodents and insects.....	1.2	1.6	Miscellaneous.....	29.5	16.3

¹ Only field work of specialists as reported by county extension agents included.

IMPROVED PRACTICES ADOPTED

The chief object of extension work is to obtain the acceptance by farmers and home makers of the better methods of agriculture and home economics being taught by the extension service. The number of instances where improved practices were put into effect in 1924 was 3,843,781 as compared with 5,462,526 in 1923. A considerable portion of this decrease is due to a slightly different method of reporting in 1924 and to the incomplete information received from a few States. The results of current demonstrations are often not apparent until several months after the demonstrations have been started, so that the spread of the improved practices demonstrated can not be measured until the following year. This is true also of many other extension activities. The most progressive farmers and home makers are reached first so that the number of new persons adopting a particular practice for the first time will naturally decrease somewhat over a period of years, provided the same expenditure of extension effort is made.

The average number of practices reported adopted during the five-year period 1920 to 1924 is slightly in excess of 4,000,000 per year. This figure does not represent different farms and homes, since the same farm might be reached in connection with dairy as well as with potato activities and the same home with clothing as well as with house furnishings. It is probable that nearly 3,000,000 different farms and homes have been effectively reached each year through extension.

The number of practices adopted in 1924 is given by projects in Table 2, with corresponding information for 1923 for comparison. The number of improved practices changed increased over the preceding year in the case of forestry, dairying, rural engineering, rodents and insects, home management, house furnishings, home health and sanitation, and miscellaneous. The largest losses were in cereals, potatoes, cotton, and other special crops, horticulture, agricultural economics, foods and nutrition, and clothing.

The projects or lines of work showing increased number of practices adopted are for the most part newer projects where the subject-matter field is being rapidly developed or where the crop or livestock enterprise has been relatively profitable during the past several years. The low prices received for grains, potatoes, and fruits for several years prior to 1924 naturally resulted in lessened interest in these

crops. In the case of agricultural economics, many of the larger cooperatives have reached a point where less assistance from extension workers is needed. There has also been less demand from farmers during the year for the formation of new cooperative associations.

TABLE 2.—*Improved practices adopted in 1923 and 1924, as reported by all county extension agents*

Item	Number of instances in which improved practices were adopted		Item	Number of instances in which improved practices were adopted	
	1923	1924		1923	1924
Soils.....	323, 009	262, 351	Rodents and insects.....	173, 376	181, 221
Cereals.....	374, 809	197, 434	Agricultural economics.....	1, 098, 363	649, 291
Legumes and forage.....	312, 745	218, 026	Foods.....	888, 431	283, 273
Potatoes, cotton, and other special crops.....	311, 864	187, 246	Nutrition.....		
Horticulture.....	369, 991	240, 949	Clothing.....	383, 592	292, 131
Forestry.....	4, 635	5, 628	Home management.....	93, 073	59, 020
Dairying.....	315, 569	375, 492	House furnishings.....		
Animal husbandry.....	240, 956	185, 214	Home health and sanitation.....	112, 463	128, 767
Poultry.....	309, 719	233, 691	Miscellaneous.....	39, 847	43, 176
Rural engineering.....	110, 084	114, 487	Total.....	5, 462, 526	3, 843, 781

SOIL IMPROVEMENT ³

Very definite progress has been made during the 10 years in the improvement of soil fertility, the most important phases of which have been the increased use of lime, cover crops, green manures, and high-analysis fertilizers.

During the first part of the 10-year period, demonstrations with lime were confined to showing farmers the need for it and the best grades to use. After farmers began generally to recognize the value of lime, extension agents became active in developing sources and methods of distribution in order to make it more easily available. During the years 1915 to 1921, 7,364 local sources of lime were developed and 2,224 small community limestone crushers were introduced, which helped to solve the problem of obtaining limestone at reasonable prices, especially in sections not located near railroads. Considerable work has also been done in organizing small groups of farmers to cooperate in erecting bins at railroad sidings for storing lime, which can then be hauled at the farmer's convenience.

Material progress has been made in demonstrating the use of cover crops and green manures to supply the nitrogen and organic matter needed by the soil, especially in humid sections of the country. In the Northern States, sweet clover, and in the Southern States, cowpeas, soy beans, velvet beans, crimson clover, and hairy vetch have been emphasized by extension agents as green-manure crops valuable for soil-building purposes (fig. 9).

To encourage the use of higher-grade and standardized fertilizers looking to improvement of crop production, local fertilizer meetings have been held in numerous States at which extension and research workers from the college met with representatives of fertilizer concerns and local dealers to study fertilizer investigations and to arrive at certain standards generally acceptable. The value of high-analysis

³ Drainage, irrigation, terracing, and land clearing are discussed under rural engineering on p. 29.

fertilizers was emphasized at such meetings. Demonstrations in the home mixing of fertilizers have also been conducted by State extension forces. As a result of these two activities over the 10 years, a large part of the tonnage of fertilizer sold is now composed of either high-analysis mixed goods or consists of fertilizer ingredients for home mixing by farmers.

During 1924, extension work in soil fertility was reported by 1,903 extension agents, who conducted 38,589 result demonstrations and influenced 262,351 different farmers to put into practice one or more of the improved practices taught. A total of 167,886 farmers followed the advice of the agents in the use of commercial fertilizers; 34,638 farmers used lime or limestone for the first time; 49,845 farmers conserved farm manures; and 25,455 farmers practiced for the first time the plowing under of cover or other green-manure crops to



FIG. 9.—Demonstration of soil improvement through plowing under rye and vetch. During the 10 years, very definite progress has been made in soil fertility through the increased use of lime, cover crops, green manures, and high-analysis fertilizers. In 1924, extension agents conducted 38,589 soil-improvement demonstrations, and 167,886 farmers followed the advice of the agents in the use of commercial fertilizers; 34,638, in the use of lime and limestone; 49,845, in the conservation of farm manures; and 25,455 in the plowing under of cover or other green-manure crops

increase soil fertility. Although approximately 4,000 more soils demonstrations were completed or carried through the year in 1924 than in 1923, the number of different farms effectively reached by soils work was 60,000 less.

FIELD CROPS

During the 10-year period, extension workers have emphasized particularly the use of seed of improved and standardized varieties, the development of adequate sources of good seed, the organization of seed-improvement associations, composed of and operated primarily by the farmers themselves, and the value of smut control, including in recent years the copper-carbonate treatment.

During 1924, the number of adult demonstrations in field crops increased 6 per cent and the number of junior demonstrations in

creased 23 per cent over the previous year. The number of farmers adopting improved practices in connection with field crops was 39 per cent less in 1924 than in 1923.

In the case of field crops, as well as with the other projects, a decrease in number of farmers adopting improved practices is not inconsistent with an increased number of demonstrations conducted, as might appear. The result demonstration, although an important means of extension teaching, is only one of the many means and agencies employed by extension workers. The results of current demonstrations are also not apparent until near the close of the growing season, so that the spread of practice resulting from the demonstration can not be measured until the following crop year.

In the case of cereals, both adult and junior demonstrations increased 7 per cent over 1923, and the number of farmers adopting practices decreased 47 per cent. The increase in legume and forage-crop demonstrations was comparatively small, being 3 per cent for adult demonstrations and 6 per cent for junior demonstrations. The number of farmers modifying practices in growing legumes decreased 30 per cent as compared with the preceding year.

Potatoes, cotton, tobacco, and other special crops, as a group, had a 12 per cent increase in adult demonstrations and a 49 per cent increase in junior demonstrations over 1923. The large increase of over 50 per cent in the number of adult result demonstrations with cotton more than offset the decreases in adult demonstrations with potatoes, sweet potatoes, and tobacco. In the case of all the individual crops, the number of farmers adopting new practices for the group during the year was 40 per cent less than in 1923.

CORN

The various phases of corn-improvement work carried on by extension workers during the past 10 years have included demonstrations in the value of growing corn as a feed crop in sections where corn was not universally grown, in the value of adapted improved varieties over common seed, and, especially in New England and other northern dairy States, in the value of certain varieties of corn for silage purposes (fig. 10).

Two of the most outstanding results of the work were the expansion of the corn area in the 11 Western States from 793,000 acres in 1914 to 2,637,000 acres in 1923 and the development of seed-corn selection and germination testing which has become a recognized part of corn production on perhaps a majority of farms in the Corn Belt.

In the Southern States considerable work has been done in growing corn as a feed crop in connection with their program for crop diversification and the introduction of livestock. Livestock could not have been permanently established in the Cotton Belt without the corn-demonstration work. Records indicate that during the years 1915 to 1918 from 11,500 to 17,000 demonstrations in growing corn as a feed crop were conducted annually.

Silage production is an important part of the feed-production program of the Eastern States, and extension agents have done much to supply the demand through the establishment of seed-corn centers to grow varieties of corn especially adapted to the area. During the

10 years 1,165,252 farmers in the United States adopted improved cultural practices in corn growing due directly to cooperative extension work.

During 1924 13,892 adult and 17,323 junior result demonstrations were conducted with corn, or practically the same number as in the preceding year. A total of 106,698 different farmers adopted improved methods of corn growing, or about 65,000 less than in 1923; 42,731 farmers planted improved seed; and 44,231 farmers practiced seed selection.

WHEAT

During the 10 years, demonstrations showing the effect of wheat seeding in various latitudes, particularly in relation to the fly-free date, and tests through which outstanding varieties or strains have been standardized for particular localities have been important.



FIG. 10.—County agricultural agent and farmers inspecting purebred seed corn. Outstanding phases of corn-improvement work carried on by extension agents during the 10 years have included demonstrations in the value of growing corn as a feed crop in sections where corn was not universally grown, in the value of adapted improved varieties over common seed, and in the value of certain varieties of corn for silage purposes

As a result of extension activities in conducting tests, field demonstrations, campaigns, and through the establishment of reliable sources of seed, whole communities and regions have discarded old mixtures and are growing one approved variety particularly adapted to local conditions. Considerable work has also been done in introducing and promoting new and proved varieties of wheat and in controlling wheat smut.

Although the 8,530 adult and the 723 junior demonstrations conducted with wheat in 1924 do not vary greatly from the number conducted in 1923, the number of different farmers adopting improved wheat practices decreased materially during the year. In 1923, 94,305 farmers were reported as adopting improved practices in wheat growing as compared with 36,908 in 1924. The number of farmers

sowing improved seed for the first time decreased from 52,909 to 15,084 and the number of farmers treating seed for smut, from 37,443 to 8,324.

OATS

As with wheat, the variety standardization of oats has been the most valuable work done by extension workers with this crop during the 10-year period. Next to this in importance has been the control of oat smut, which was emphasized especially from 1914 to 1919. Since then the attention given this project has decreased as farmers are now generally practicing the prescribed treatment.

During 1924, the number of different farmers adopting better methods of oat growing for the first time was 32,731 as compared with 74,425 the previous year. Corresponding decreases occurred in the number of farmers sowing improved seed and treating seed for smut. The 5,832 adult demonstrations conducted in 1924 represent a slight increase over the corresponding figure for 1923.

ALFALFA

No figures are available of the acreage devoted to alfalfa in 1915, but it is known that no large areas were grown outside of the irrigated sections of the West and Kansas and Nebraska. In 1924, however, the area amounted to 10,454,782 acres. During the six years from 1919 to 1924 alone, the acreage in the United States has increased 21.2 per cent. Much of the increased acreage of this valuable forage crop can be attributed to extension workers, who have conducted demonstrations in showing that alfalfa is a hardy legume crop when grown with proper precautions and who have developed sources of seed of the proper variety.

The increased emphasis on extension work with alfalfa in 1923 was maintained in 1924. A total of 14,053 adult demonstrations was conducted as compared with 10,354 the preceding year, and 56,297 farmers improved their methods of growing this crop as compared with 56,355 in 1923. The practice of inoculating the seed was adopted by 32,120 farmers and the use of improved seed was taken up by 29,673.

SOY BEANS

The growing of soy beans in the United States has developed almost entirely since 1909, when only 1,629 acres were reported by the census. In 1919, 19 of the most important soy-bean-producing States grew 98,461 acres and by 1924 this had increased to 2,566,000 acres or 2,505 per cent. Probably more extension work has been done with soy beans than with any other legume crop and the large increase in its use during the last few years can be credited to the recommendation by extension workers of outstanding varieties and to demonstrations of its value as a supplementary feed and for soil improvement. During the 10 years, 383,038 farmers produced soy beans according to methods advocated by extension workers.

During 1924, 60,101 different farmers improved their methods of soy-bean growing, or about 19,000 less than in 1923. The practice of inoculating the seed was followed by 26,549 farmers for the first time, or about 11,000 less than the previous year; the use of better seed was taken up by 24,666 farmers in 1924 as compared with 33,455 in 1923; and 14,905 adult result demonstrations were conducted, or practically the same number as in 1923.

SWEET CLOVER

Sweet clover, which 10 years ago was commonly considered as a wayside weed of value only as a bee pasture, is rapidly becoming important as a legume crop and soil builder, especially under adverse conditions, as where the summer rainfall is small. Although national statistics of acreage are not available, it is known to be large and rapidly increasing. Ohio, for instance, increased its production from 100 acres in 1914 to 150,000 acres in 1924. Similar progress has been made in Illinois, Iowa, Nebraska, and other States. In many States in 1924 the acreage was very nearly equal to that of alfalfa. This change in attitude and rapid expansion of acreage is largely owing to tests, demonstrations, and campaigns conducted by extension workers. During the 10 years 112,728 farmers have been reported as growing sweet clover under directions of extension workers.

During 1924, 7,626 adult demonstrations were conducted with sweet clover, or an increase of 600 over last year. The number of new farmers using improved seed was 10,390 in 1924 as compared with 12,300 in 1923. The total number of different farms adopting some better method of growing this crop was 24,082 in 1924, or 6,000 less than in 1923.

COWPEAS AND OTHER LEGUMES

Reports of extension agents indicate that during the 10 years much emphasis has also been placed on the production of other leguminous crops, such as cowpeas, clover (red, alsike, and white), crimson clover, velvet beans, field beans, lespedeza, and peanuts. Much of this work has been done in the Southern States where legumes have been urged for planting in rotation with cotton; cowpeas and velvet beans have been principally used. During the 10 years, 41,406 adult demonstrations with cowpeas involving 817,354 acres and 38,738 adult demonstrations with velvet beans involving 920,766 acres have been conducted in the Southern States. Red clover has not shown a very largely increased acreage over the 10-year period, owing principally to the increased production of alfalfa, sweet clover, and soy beans, and to the difficulty of obtaining clover seed adapted to soil and climatic conditions.

In 1924 a marked decrease took place in extension work with cowpeas. The number of adult demonstrations decreased from 7,117 in 1923 to 5,836 in 1924, and the number of different farmers making changes in methods of growing this crop decreased from 24,599 in 1923 to 11,143 in 1924. In addition to the more generally grown legumes, a large amount of extension work with other legumes, such as lespedeza, peanuts, crimson clover, velvet beans, and field beans, was reported by extension agents in 1924.

PASTURES

Pasture improvement has received considerable attention of extension workers during the past 10 years. In New England it has been concerned principally with renovating old permanent pastures by means of reseeding and treating with limestone and acid phosphate. In the Southern States, where practically no permanent pastures existed in 1914, the pasture improvement program has developed

very rapidly and during the past four years has become one of the outstanding agronomy projects. In this group of States the permanent development of the livestock industry is practically dependent on the establishment of good pastures. In the Western States, which contain large areas of range pasture, the principal extension work has been in recommending grass mixtures for both irrigated and range pastures and in controlling the ranges to allow native grasses to reseed.

In 1924 interest in increasing the carrying capacity of ranges and pastures was maintained at about the 1923 level. The number of adult result demonstrations increased from 6,737 in 1923 to 8,384 in 1924. The number of farmers putting into practice better range or pasture methods decreased from 19,205 in 1923 to 13,868 in 1924.



FIG. 11.—Demonstration field contrasting potatoes grown from certified seed using approved methods of treatment with potatoes grown from ordinary bin-selected seed. Through the use of similar demonstrations throughout the country during the past 10 years, thousands of farmers have accepted approved practices of potato-seed selection and treatment, fertilization, cultivation, and crop rotation, with the result that a very decided improvement in acre production has been effected

POTATOES

Potatoes have been one of the staple field and garden crops of the United States for more than 200 years, and the production has kept pace with the increase of population on the basis of about $3\frac{1}{2}$ bushels per capita. Although extension workers have not attempted to increase or control the acreage planted to potatoes, a very decided improvement in acre production has been effected during the past 10 years through seed selection and treatment, better fertilization, improved cultivation, and crop rotation (fig. 11). The outstanding extension work has been the promulgation of seed-certification and seed-treatment methods. In many cases county agricultural agents and State specialists have been the most important agency for carry-

ing into effect both seed certification and treatment practices. Many demonstrations have shown an increase of 30 to 60 bushels to the acre, due to seed certification and treatment.

During 1924 the decrease in the number of adult demonstrations with potatoes from 11,549 in 1923 to 9,836 in 1924 was offset by the substantial increase in junior demonstrations from 7,830 to 9,722. The number of farmers influenced by extension work to plant improved seed, to treat seed for disease, and to spray or dust to control disease was about 50 per cent less than during 1923. The number of different farmers changing potato practices was 59,950 in 1924, as compared with 125,401 in 1923.

SWEET POTATOES

Sweet potatoes, although primarily a southern crop, are grown for the market in about 24 or 25 States and for home use in 10 or 12 additional States. Owing to the influence of extension activities during the past 10 years, the production of sweet potatoes for the market has been largely standardized through seed selection and improvement, seed certification and treatment, elimination of undesirable varieties, better methods of fertilization, the adoption of satisfactory storage methods, and the proper grading and marketing of the product.

As with potatoes, extension work with sweet potatoes declined considerably from 1923 to 1924. The number of adult demonstrations was 3,249 and junior demonstrations 1,441, as compared to 3,527 and 1,846, respectively, for 1923. The number of different farmers making changes in methods of growing sweet potatoes decreased from 17,810 in 1923 to 10,450 in 1924.

COTTON

In spite of the ravages of the cotton-boll weevil it has been possible for farmers in the Cotton Belt to make a good living and to receive a cash income besides. This has been owing principally to the successful efforts of extension agents in adapting southern agricultural practices to the raising of cotton under boll-weevil conditions. Not only have extension workers attempted to diminish the injury to the cotton crop by controlling the insect, but also to offset its attacks by improving the general practice of agriculture.

As a means of combating the weevil, extension agents have been especially active in carrying on demonstrations with improved early-maturing varieties of cotton, in standardizing the varieties in order that farmers may have pure seed for planting, in developing supplies of seed in sufficient quantities to make the good varieties available, and in spreading the latest information on methods of poisoning the weevils.

During the 10 years extension agents have conducted 71,372 adult demonstrations involving 1,577,829 acres, or an average of over 7,000 demonstrations per year with an average demonstration area of more than 150,000 acres. The average yield of lint cotton on the demonstration farms has been 331 pounds, as compared with 159.1 pounds, the average yield for farms in the United States.

In 1924 15,914 adult result demonstrations were conducted with cotton as compared with 9,820 conducted in 1923 and 9,829 junior

demonstrations in 1924 as compared with 4,459 in 1923. The planting of selected seed was adopted by 29,146 new farmers in 1924 as compared with 60,077 farmers the preceding year. Spraying or dusting to control insects and diseases was adopted by 33,846 farmers in 1924, whereas 63,542 were reported taking up the practices in 1923. The number of farmers making changes in methods of producing cotton declined from 136,239 in 1923 to 94,972 in 1924.

TOBACCO

In a number of States, especially during the last four years, tobacco growing has developed rapidly. Extension activities in which the most effective results have been obtained are the introduction of disease-resistant strains, varietal standardization, and increasing the quality of tobacco through improving the soil. In 1924 15,000 farmers changed their methods of growing tobacco, or 11,000 less than the year before. The number of adult result demonstrations also decreased from 3,570 in 1923 to 2,281 in 1924.

HORTICULTURE

During the 10-year period horticultural extension work has developed to the point where it is becoming one of the important branches of extension work. It is organized in the States at present under three main heads: Pomology, vegetable gardening, and landscape work. Certain phases of the horticultural extension work are handled under the division of field crops in most of the States. This applies to such crops as potatoes and sweet potatoes.

Less horticultural extension work was done in 1924 than during 1923. The number of adult demonstrations dropped from 97,266 to 70,510, and junior demonstrations from 60,407 to 56,152. The number of farmers effectively reached by all phases of horticultural extension was 240,949 in 1924 as compared with 369,991 in 1923.

TREE FRUITS

The past 10 years has witnessed a remarkable expansion of the fruit industry and a great increase in acreage planted to orchards. Extension forces have taken an active part in this general improvement through pruning and spraying demonstrations, the renovation of old and neglected orchards, the improvement of orchard tillage and cover crops, orchard fertilization, spray-schedule service, the formation of spray rings, the selection of varieties adapted to the various regions, and the establishment of central grading and packing houses. Owing to the activities of extension forces, the quality of fruit produced for the market has been greatly improved during the past 10 years.

In 1924, 16,243 adult result demonstrations with tree fruits were conducted, or approximately the same number as in 1923. The number of junior demonstrations declined from 3,375 in 1923 to 480 in 1924. The number of farmers following better methods of pruning, spraying, fertilizing, and other orchard-management practices for the first time during the year was 64,083, as compared with 134,109 in 1923.

BUSH AND SMALL FRUITS

In a number of States horticultural extension workers have been instrumental in establishing small-fruit growing, especially strawberries, on a community basis. This work has included the selection of the proper locations, the obtaining of the right varieties, improvement of cultural methods, proper grading, packing, and cooperative marketing.

In 1924, 1,644 adult demonstrations and 357 junior demonstrations were conducted with these crops, as compared with 4,985 and 2,250, respectively, in 1923. The larger part of this decrease came in the work of home demonstration agents. Improved practices in growing these crops were followed for the first time by 7,313 farmers, as compared with 23,135 during the preceding year.

GRAPES

Grape growing has been developed during the past 10 years primarily on a community basis. Extension workers have been instrumental in obtaining the adoption of the right varieties, in demonstrating the proper methods of pruning and training the vines, and in the control of diseases. Through the efforts of extension workers, central packing houses and cooperative marketing methods have been established.

In 1924 improved practices in grape culture were accepted for the first time by 9,201 farmers, as compared with 28,947 in 1923. Adult demonstrations decreased from 3,871 to 2,796 and junior demonstrations from 1,420 to 86. Again the large decrease in the amount of extension work done with this crop is largely accounted for by the reports of home demonstration agents.

MARKET GARDENING

Vegetable-gardening specialists and county agricultural agents have been rendering service to vegetable growers in at least 10 different ways, including the obtaining of better seed for planting their crops, the maintaining of soil fertility under a diminishing manure supply, the control of insects and diseases, the economical use of fertilizers, spraying and dusting for the control of diseases, better methods of grading and packing for the market, and cooperative marketing. The production of vegetables for the market during the past 10 years has kept pace with the increase in population; however, there has been a tendency to greater standardization and localized crop production with several of the vegetables. The outstanding problems of vegetable extension work at present are the obtaining of better strains of seed, the control of insects and diseases, and the grading and preparation of the products for the market.

In 1924, extension work in market gardening received much less attention than during 1923, which is indicated by the fact that only 6,178 adult result demonstrations, or 43 per cent as many as in 1923, were reported by extension agents. The number of junior demonstrations declined from more than 10,000 to a few hundred, the decrease being largely accounted for by reports of home demonstration agents. Better methods of truck raising were put into practice by 20,647 farmers, as compared with 47,228 in 1923.

HOME GARDENING

In 1919 home vegetable gardens were maintained on practically 80 per cent of the farms of the United States, according to the census figures. The work of the extension forces, during the past 10 years, has had for its object not only the planting of a home garden on every farm, but giving more attention to maintaining the home vegetable garden throughout the year. This is particularly true in certain of the Southern States, where little attention is ordinarily given the garden during the middle of the summer. Through the efforts of extension workers, thousands of farmers have planned to obtain from their gardens at least two vegetables every day in the year. In some of the Northeastern States, home-garden extension has outgrown the facilities for handling it and there has been a much greater demand for the work than could be supplied.

In 1924, in direct contrast to market gardening, extension work in home gardening received even greater emphasis than in 1923. The number of adult demonstrations decreased slightly from 37,725 to 30,158. The number of junior demonstrations increased from 26,823 to 41,796. The number of farms or homes given assistance with home gardens increased from 89,156 to 91,580.

BEAUTIFYING HOME GROUNDS

Realizing that one of the great needs for the improvement of farm life is to have more attractive home surroundings, landscape extension workers have conducted a campaign for the general improvement of the farm home through type demonstrations, about two of which are usually located in a county. In addition to the improvement of home surroundings, large numbers of school, church, and public-building improvement demonstrations have been established with a view to showing the people in general what can be accomplished through planting lawns, native trees, and shrubbery.

In many cases activities of the landscape extension worker have been coordinated with those of the home demonstration agent for the purpose of improving both the exterior and the interior arrangement of the home. Flowers have been substituted for weeds in the dooryard, and trees planted through the efforts of the extension workers have added greatly to the comfort of rural people. In many States the demand for the landscape extension work on farms has far exceeded the resources of the extension forces. In some cases the improvement has consisted simply in the planting of shade trees and a few shrubs around the house. In other cases the demonstrations have been more elaborate and have included a general landscape treatment of the entire farm surroundings, often including the rearrangement of buildings, fences, and driveways.

In 1924, 48,125 farms and homes were influenced to beautify home grounds, compared with 47,416 in 1923. Junior demonstrations, however, dropped from 16,130 to 12,766, and adult demonstrations from 20,003 to 13,491.

FORESTRY

Although farm forestry is a comparatively recent development in the field of extension work, extension workers have made satisfactory progress in bringing about a more complete utilization of farm land not needed or not suitable for agricultural crops and in increasing

and conserving the timber supply of the Nation. Extension effort has been centered principally on encouraging timber planting on waste farm land, developing existing stands of timber through thinning and improvement cuttings, preserving fence posts, and controlling white-pine blister rust.

Although the amount of extension work in forestry has never been large, and in 1924 involved but 1,719 adult demonstrations and 218 junior demonstrations, these figures represent a large percentage of increase over 1923. The number of farmers following better forestry methods increased from 4,635 in 1923 to 5,628 in 1924.

LIVESTOCK

Perhaps the largest contribution the extension agent has made to livestock improvement has been in connection with livestock-disease work. He has effectively aided control agencies by developing through campaigns and demonstrations a favorable public sentiment for united action in establishing accredited herds and disease-free areas. In connection with cattle-tick eradication, of the 975 counties quarantined in 1916, 693 had been released by 1923. Much of this success may be attributed to the spread of improved practices as a result of demonstration work. Extension agents have also been actively and just as successfully engaged in cooperating in the eradication of hog cholera, tuberculosis, blackleg, and other diseases which affect livestock. During the 10 years, 5,640,573 animals have been tested for tuberculosis through the influence of the extension agent and 4,820,539 have been either vaccinated for blackleg by the agent in demonstrations or by farmers acting under his direction.

Herd improvement also has been one of the principal extension activities in livestock. During the 10 years, farmers have procured on the advice of county extension agents purebred animals as follows: 23,942 horses and asses, 125,942 beef cattle, 234,562 dairy cattle, 77,829 sheep and goats, and 362,625 hogs. The beneficial effect which the introduction of 824,900 purebred animals has had upon the livestock industry has been most marked.

The decline in number of livestock demonstrations evident in the 1923 reports continued in 1924. Twenty-five per cent less adult result demonstrations were carried out in 1924 than in 1923. During this same period, junior demonstrations increased 2 per cent. The number of farmers following better livestock practices taught by the extension service decreased only 8 per cent during the year. The decrease in livestock work was primarily in swine and poultry, beef cattle and sheep about holding their own and dairying making a good increase.

DAIRY CATTLE

In addition to the large amount of extension work in animal diseases, extension agents have helped considerably, during the 10-year period, in the establishment of the dairy industry in the Southern and Western States. In these regions, where farmers have been largely unacquainted with dairy management or the qualities to be looked for in a dairy animal, extension agents have helped materially through the introduction of purebred sires and high-producing cows, demonstrations in feeding, care, and management o-

dairy stock, and in the handling and disposition of dairy products. Through their efforts along this line, these regions have been provided with a better-balanced agriculture and a wholesome and much-needed addition to the family food supply. That their work has had great influence is indicated by the fact that the number of dairy cows in the Western States increased by 392,000 and in the Southern States by almost a million during the 10 years. Cow-testing associations have been encouraged generally throughout the country. The agents have promoted the organization of 4,208 such associations during the 10 years, and 2,118,840 cows have been tested. Silo building has also been important in relation to dairying. In all, 71,435 demonstration silos of all types have been constructed under the direction of extension agents, which have resulted in the construction of hundreds of others.

In 1924, 33,275 adult and junior demonstrations were carried to completion as compared with 31,580 in 1923. In all, 375,492 different farmers were influenced to take up at least one new dairy practice during the year. This number is approximately 60,000 greater than the preceding year and includes 11,564 dairymen assisted in obtaining purebred dairy sires, 14,984 farmers assisted in obtaining high-grade or purebred females, 57,544 farmers adopting improved practices in the sanitary production and care of milk, 54,470 farmers feeding better-balanced rations, and 277,056 farmers directly influenced to test their dairy animals for tuberculosis. Extension agents aided the organization or reorganization of 430 new bull associations with 6,467 members and 918 cow-testing associations with 19,402 members, and 35,044 other farmers were assisted in testing their cows for production, with a total of 322,046 cows under test.

BEEF CATTLE

Major extension activities that have influenced farmers in beef cattle production during the 10 years have been in connection with testing animals for tuberculosis, vaccinating for blackleg, and introducing purebred sires and females. Much demonstration work has also been done in improving feeding, breeding, management, and marketing methods, as factors bearing on the problems of reducing the costs of production and increasing the market value of beef cattle. The beef animal has proved to be popular with boys and girls, who have done creditable work in growing beef cattle under the direction of extension agents.

In 1924, extension agents conducted 1,724 adult demonstrations and 5,100 junior demonstrations, or slightly more than the number of demonstrations carried on in 1923. The number of different farmers taking up improved practices of beef-cattle production advocated by the extension service increased from 65,236 in 1923 to 94,323 in 1924. Of the latter, 78,415 were directly influenced to test their animals for tuberculosis, 4,425 were assisted in obtaining purebred sires, and 6,705 were directly influenced to vaccinate for blackleg.

SHEEP

Extension workers have recognized the need of improving the quality of lambs produced in the spring-lamb producing areas, and during the past few years have put forth organized effort to achieve

results through lamb standardization, castrating, and docking, control of stomach worms, better feeding, and the use of purebred rams.

In 1924, the number of demonstrations conducted with sheep increased materially over 1923, the 1924 figures being 2,800 adult demonstrations and 2,315 junior demonstrations. Purebred rams were obtained by 3,580 farmers and high-grade or purebred ewes by 2,851 farmers on the advice and assistance of extension agents. Agents influenced 2,616 farmers to feed balanced rations and 2,822 farmers were assisted in controlling insect pests. The total number of different farmers effectively reached was 15,236, or approximately the same as in 1923.

SWINE

One of the most serious problems in economical pork production has been the loss of swine from parasites and diseases due to improper sanitary conditions, especially hog cholera and the common round worm. Extension workers have therefore devoted considerable demonstration effort to combating such diseases through proper sanitation as a remedy and preventive. The demonstration of the effectiveness of the serum treatment for hog cholera so that the farmer himself might successfully immunize his own hogs or procure the services of a competent veterinarian has been emphasized with good effect. Agents have rendered effective assistance in such work in obtaining local cooperation and in preliminary educational campaigns. Much extension work has also been done in swine management, breeding, feeding, marketing, and the introduction of purebreds. (Fig. 12.) Effective work in improving the swine industry has been accomplished through ton-litter clubs, which have been popular in recent years.

During 1924, 400 more adult demonstrations and 7,000 less junior demonstrations were conducted with swine than in 1923. The total number of different farmers adopting improved practices also decreased from 146,869 in 1923 to 72,936 in 1924. Assistance in obtaining purebred boars was rendered 9,547 farmers and in obtaining high-grade or purebred sows, to 8,878 farmers. As a result of extension effort, 13,874 farmers began feeding balanced rations, 8,894 were assisted in controlling insect pests, and 31,751 were directly influenced to immunize their swine against cholera.

POULTRY

Probably the most universal project has been poultry culling. By means of rather simple culling demonstrations, hundreds of thousands of farmers have been taught to cull out the hens that are poor producers. Other extension activities in poultry have been proper housing, introduction of standard-bred fowls to replace mongrel types, eradication of poultry diseases, proper and economical feeding, egg grading, and poultry dressing. During the 10 years, 929,927 farmers have been reported as changing their poultry practices owing to demonstration work.

In 1924 about the same number of junior poultry demonstrations were conducted as in 1923. The number of adult demonstrations decreased 36 per cent and the number of different farms putting into practice the poultry teaching of the extension service declined from 309,719 in 1923 to 233,691 in 1924. Extension agents assisted

48,397 farmers to control insect pests, 77,012 to feed balanced rations, 88,574 to cull their flocks, 32,643 to obtain purebred cockerels, and 24,655 to obtain high-grade or purebred birds.

RURAL ENGINEERING

During the 10 years just passed probably the most outstanding extension work in rural engineering was done in terracing, drainage, irrigation, and land clearing. In the Southern States, as a result of this effort, well-constructed terraces have quite generally superseded the washed and gullied fields of a few years ago. Through drainage systems established with the help and advice of county agricultural agents, 6,220,776 acres have been restored to their full productive capacity during the 10 years. An area of 4,432,024 acres has been



FIG. 12.—Farmers attending a cooperative hog sale. Extension work in swine during the past 10 years has emphasized the control of diseases through proper sanitation and the effectiveness of the serum treatment for hog cholera. Extension agents have also done considerable work in swine management, breeding, feeding, marketing, and the introduction of purebreds

brought under irrigation through educational work conducted by extension agents. In land clearing, 1,234,219 acres have been cleared during the 10 years as a result of extension effort.

Considerable attention was also given to household engineering by county agricultural and home demonstration agents. Extension activity has resulted in the introduction of such time and labor-saving conveniences as running hot and cold water, kitchen sinks, indoor toilets, and home power and lighting systems, which has given the farm wife more leisure time to devote to developing a cultural and social farm life more attractive and satisfying to every member of the farm family.

During 1924 rural-engineering extension received more attention than during 1923. The number of adult demonstrations increased from 11,115 in all phases in 1923 to 17,468 in 1924, and the number of farmers reached from 110,084 in 1923 to 114,487 in 1924. During 1924, 5,019 farmers were assisted in installing drainage systems,

24,451 terraced according to directions, 2,872 sewage-disposal systems were installed, 21,457 farmers remodeled buildings other than dwellings, and 50,603 farmers cleared their cut-over land according to improved methods advocated by extension agents.

RODENTS AND INSECTS

During the last eight years, extension workers have been cooperating with the Biological Survey in organizing campaigns for the control of such rodent pests as prairie dogs, ground squirrels, jack rabbits, pocket gophers, meadow mice, and moles. (Fig. 13.) Since 1916, when the work started, rodents on 12,000,000 acres of Federal land and 105,000,000 acres of State and private lands have been poisoned through organized campaigns, with an estimated saving of \$72,000,-



FIG. 13.—Mixing the bait for use in a gopher-poisoning campaign. Extension agents in cooperation with the Biological Survey since 1916 have helped to clear rodent pests such as prairie dogs, ground squirrels, jack rabbits, pocket gophers, meadow mice, and moles from 12,000,000 acres of Federal land and 105,000,000 acres of State and private lands with an estimated saving of \$72,000,000

000. From 1918 to 1923, extension agents in the Western States, where most of the rodent-control work has been carried on, have worked directly with 310,852 farmers, involving 62,674,260 acres.

In 1924 extension work in controlling rodent and animal pests was reported by 39 more extension agents than in 1923. The number of demonstrations carried out decreased from 13,123 in 1923 to 9,726 in 1924, and the number of farmers adopting control methods advocated declined from 85,352 in 1923 to 74,066 in 1924.

Grasshoppers and other insects not peculiar to individual crops received increased attention during the year. Nearly 1,800 more result demonstrations were completed and 25,000 more farmers reached than in 1923.

AGRICULTURAL ECONOMICS

Extension agents, especially in recent years, have met the need of thousands of farmers by devoting much time and effort to making available data and expert advice that would assist farmers in the solution of their economic problems. Such activities have included, in general, the giving of information on methods of organizing commodity marketing and purchasing associations and explaining the conditions necessary to their success and the demonstrating of better business principles of farming, including the value of the farm record as a means of determining factors limiting success.

FARM MANAGEMENT

The trend of farm-management extension during the 10-year period has been toward practical methods enabling an increasing number of farmers to profit to a greater extent from a proper conception of the business principles of farming and through a more general analysis of their individual farm accounts. Keeping, summarizing, and analyzing farm accounts, as explained by extension workers, has aided farmers in large numbers to know more about their farming operations from the standpoint of profit and loss. This has resulted in better management and consequent increased profit.

In 1924, farm accounts were kept by 16,867 farmers (fig. 14) or by approximately the same number as in 1923. In all, 5,985 boys and girls completed the work outlined for the farm-management clubs, or practically the same number as in 1923. On the advice of extension agents, 30,288 farmers made changes in the management of their farms, and 11,898 farmers were advised regarding leases, 15,510 farmers cooperated in keeping cost-of-production records, and 12,150 farmers were assisted in obtaining credit.

MARKETING

The extension agent has also given consideration to the most advantageous methods of disposing of the farmer's products and of purchasing his supplies. His efforts along this line have been confined to counseling with the farmers on the type of cooperative organization to form, the contract most suited to the needs of such an organization, the laws governing its operation, and the grading and packing of products.

A review of the marketing work reported by extension agents during the past five years indicates that the amount of time required of them in meeting problems of marketing organization is gradually decreasing. (Table 3.) Many associations have been so successful that they now employ expert managers and specialists of their own and therefore do not need the assistance of extension agents formerly rendered. Other associations have ceased to function, due to poor management or to having completed the job for which they were organized. In 1924, extension agents cooperated with 3,116 associations with a membership of 566,149 doing a business valued at \$233,375,494 and making a profit or saving of \$20,965,999.

TABLE 3.—*Marketing extension work, 1920–1924, as reported by county extension agents*

Item	1920	1921	1922	1923	1924
Number of cooperative associations assisted in organizing or cooperated with.....	9, 260	7, 352	7, 429	6, 262	3, 116
Value of business done by associations and individuals assisted.....	\$474, 965, 111	\$360, 831, 393	\$255, 800, 130	\$321, 031, 854	\$233, 375, 494
Total saving or profit.....	\$30, 601, 162	\$25, 262, 051	\$17, 620, 869	\$25, 473, 075	\$20, 965, 999
Farms and homes assisted with marketing problems.....	677, 776	583, 511	945, 837	939, 298	566, 149



FIG. 14.—Farmer keeping his farm account according to approved methods explained and illustrated by extension workers. Through keeping, summarizing, and analyzing such accounts, farmers have learned to measure the efficiency of their business and at what points they should be able to readjust the organization or operation of the farm with a view to increasing their profits

FOODS AND NUTRITION

To teach people to know and practice right food habits, because physical and mental efficiency is based primarily upon a well-nourished body, has been the aim of the extension worker in foods and nutrition. One of the most helpful extension means of working out well-balanced meals has been the use of the food-habits score card and the food calendar. Extension agents have also given considerable attention to such phases of the work as planning corrective diets; prenatal, postnatal, infant, and child feeding and care; hot school lunch; correction of constipation and of too great deviation

from normal weight; food preservation, selection, and preparation; and nutrition clinics (fig. 15).

In 1924, an increase of more than 17,000 in the number of junior demonstrations completed over 1923 was more than offset by a decrease of nearly 30,000 in adult demonstrations. The total number of different homes influenced to adopt better practices in foods and nutrition was less than half the number reported for 1923.

FOOD PREPARATION

The selection, preparation, and serving of wholesome food has been given increasing prominence by extension workers during the 10 years, especially in connection with boys' and girls' club work. Some of the phases of this work that have been conducted to meet home and community needs include: Greater use of milk and milk products, fruits, vegetables, and cereals containing bran; a more varied use of canned fruits and vegetables and seasonal foods; a greater use of labor-saving devices, such as the fireless cooker, pressure cooker, bread mixer, and iceless refrigerator, and improved table service.

In 1924, 138,537 different homes put into practice up-to-date methods of preparing food for the family. Of this number 47,310 changed practices in bread making, 35,337 in meat cookery, 59,359 in vegetable cookery, and 35,857 in preparation of dairy-product dishes. General improvement in meal preparation was brought about in 50,636 homes, and 11,934 homes budgeted the family food supply. In carrying out extension work in food preparation, 59,915 demonstrations with adults and 50,446 demonstrations with boys and girls were employed.



FIG. 15.—Measuring height of child to determine whether her weight is normal. Extension agents have accomplished much in developing a sturdy rural population with higher resistance to disease, increased physical and mental efficiency, better earning power, and a sense of greater well-being through giving attention to such phases of the work as planning corrective diets; prenatal, infant, and child feeding and care; correction of constipation and of too great deviation from normal weight; and food preservation, selection, and preparation

FOOD PRESERVATION

The economic contribution of food preservation to the improvement of farm-home conditions was early recognized and emphasized by extension workers. The canning of fruits and vegetables has probably been one of the most popular of extension activities among women and girls, especially in the Southern States, where it has been systematically developed since home demonstration work started, not only as a means of supplying food needed during the winter months, but as a major income-producing industry. Since 1917, the home canning of meat, fish, and game has also grown to large proportions. A more recent development has been the standardization of preserved native products for sale and for home use. Canning budgets have also been emphasized by extension workers as a means of providing for a more adequate supply of fruits and vegetables for use during the nonproducing months.

In 1924, approximately 4,000 less demonstrations with both adults and juniors were conducted than in 1923, and the number of homes adopting improved methods of food preservation decreased from 284,639 in 1923 to 144,736 in 1924. Improved practices in preserving fruits and vegetables were accepted by 93,347 women and in preserving meats and fish by 40,533 women. Better food storage was provided in 21,622 homes. In all, 13,701,552 quarts of fruits, vegetables, and meats were canned, 678,591 pounds of fruits and vegetables were dried, and 8,730,040 pounds of meat were cured.

NUTRITION

Nutrition work holds a prominent place in the extension program and has accomplished much in contributing to a more satisfying rural life through developing a sturdy rural population with higher resistance to disease, increased physical and mental efficiency, better earning power, and a sense of greater well-being. As a result of nutrition extension work, including prenatal, postnatal, infant, and child feeding, milk-for-health campaigns, hot school lunches, improvement of community meals, use of corrective diets, and similar activities, thousands of home makers have manifested intelligent appreciation of the importance of right feeding and increasing interest in improving the food habits of their families.

Improved practices in child feeding were adopted in 1924 in 26,201 homes. Approved methods of balancing family meals were followed by 44,990 women, and 28,179 prepared school lunches according to better methods. In all, 124,317 homes were effectively reached during the year through nutrition extension. Extension agents conducted 29,812 demonstrations with boys and girls and 28,118 demonstrations with adults.

CLOTHING

Clothing extension work has made a real contribution to thousands of farm women and girls in that it has opened the way for a program of home betterment, has developed leadership among farm women as a result of their acting as local leaders of clothing projects in their respective communities, and has become a potent factor in establishing that satisfaction and self-confidence which comes from being properly dressed. It has also proved invaluable in reducing clothing expense of the farm family. Clothing work was started by club

girls who made their own simple caps and aprons for use at public demonstrations of club work and has gradually expanded until it includes such phases as clothing selection, construction, and renovation; relation of clothing to health; improvement of line, color, and design; simplicity of decoration; children's clothing; correct corseting; proper shoes; posture; the importance of wearing clothing appropriate to the occasion and to the individual; and hat making and its relation to the costume.

In 1924, 6,327 more boys and girls completed clothing demonstrations than in 1923 and the number of adult demonstrations was 11,668 less. The number of women adopting improved practices was as follows: Selection and construction, 152,767; renovation and remodeling, 56,690; millinery, 87,247; costume designing, 49,160; infant-wardrobe planning, 25,120; and adult-wardrobe planning, 46,006. Better practices were adopted in 292,131 different homes as compared with 383,592 in 1923. With the assistance of extension agents, rural women made 429,446 dresses and coats, 496,220 undergarments, and 137,481 hats.

HOME MANAGEMENT AND HOUSE FURNISHING

Extension activities during the 10-year period have made thousands of prosperous, happy, and contented farm families through providing efficiency, comfort, and attractiveness in the farm home. Such activities have included kitchen rearrangement; introduction of labor-saving equipment; inexpensive and attractive refurnishing and decorating; house planning and remodeling; and use of household accounts and budgets, time and labor-saving schedules, and improved laundry methods.

In 1924, decidedly more emphasis was placed on all phases of home-management and house-furnishings extension than in 1923, as evidenced by a 37 per cent increase in the number of adult demonstrations, a 23 per cent increase in junior demonstrations, and a 30 per cent increase in the number of homes adopting improved practices.

HOME MANAGEMENT

Most States, especially in recent years, have conducted studies designed to place the home work of the farm wife on a sound economic basis. Extension workers have carried the results of such studies to the farm home through demonstrations, contests, tours, and similar extension activities. As a result, thousands of home makers have planned and rearranged their farm kitchens for convenience and efficiency; installed new and improved equipment designed to perform housework with the minimum expenditure of labor and time; developed better ways of standing, lifting, walking, sitting, and other activities essential to their daily life; analyzed their own problems; and adjusted to better advantage the entire sequence of the day's work. This has benefited the home maker considerably through reducing the amount of time expended on her daily work, lessening the weariness incident to home making, and releasing her from much useless expenditure of energy, thus enabling her to give more consideration to study, social activities, recreation, and advancement for family and community life.

In 1924, completed demonstrations in home management were carried out by 18,625 adults and 8,431 boys and girls, and 59,020 homes were reported as putting into practice improved methods. Labor-saving equipment was added in 36,369 homes; budgets and accounts were kept by 6,168 women; improved laundry practices were adopted by 5,756 women; and 11,034 women were assisted in systematizing their housework.

HOUSE FURNISHING

Each year during the last 10 years extension activities in house furnishing have developed greater interest on the part of farm home makers. With the advice of extension agents, thousands of farm women have made their homes more restful and attractive with a minimum expenditure of money through the refinishing of old furniture, the substitution of inexpensive and harmonizing decorations for undesirable decorations, the proper arrangement of furnishings, and similar work. It is believed that much has been accomplished by extension agents in helping the farm women develop a truer appreciation of values, thereby helping to raise the standard of living and to increase the general pleasure and comfort of all members of the farm family.

In 1924, 62,067 homes were reported as following suggestions of extension agents relative to house furnishing; 18,152 women learned better ways of caring for walls, woodwork, and floors; 19,658 followed instructions in repairing and remodeling; and 26,478 carried out improved methods of selection and arrangement of furnishings. In all, 29,581 adult and junior demonstrations were completed.

HOME HEALTH AND SANITATION

The outstanding work in home health during the 10 years has been the visualization to farm people of positive standards of health for adults and children in order to inspire them to attain health individually and to promote community sanitary conditions conducive to good health and an all-round wholesome environment. Of distinct help to rural people, especially in communities far removed from the service of doctors, nurses, and hospitals, has been information regarding simple curative measures and the proper care of the patient, which has been given by extension workers for use in emergencies and until the doctor could arrive. Much good has also been accomplished through health clinics, where consideration has been given to care of the teeth, eyes, and ears, and to bone development, exercise, diet, nerve control, straightening of backs, and the general practice of correct eating, cleanliness, and sufficient sleep. Thousands of homes have also screened their windows and porches or adopted other methods of eliminating flies, mosquitoes, and other insects, installed septic tanks and sewage-disposal systems, and provided home medicine chests through the efforts of extension agents.

In 1924, 24,534 junior and 13,972 adult demonstrations were carried to completion. Recommended health practices were followed in 60,394 homes, and 68,373 homes accepted better sanitary methods, of which number 7,838 were screened and 5,372 provided with sanitary closets.

EXTENSION METHODS

Beginning with simple local demonstrations in crop production, a wide variety of methods have been employed with success in extension organization and teaching during the 10-year period. These methods have owed their success largely to being based (1) on the consideration of local people, conditions, and practices, and (2) on enlisting the active participation of the individual farmer and his family in extension activities, including planning and carrying out the local extension program in the community. The extension of the influence of the demonstration has been accomplished chiefly through the medium of field meetings at demonstrations, tours, campaigns, contests, short courses, camps, team demonstrations, fairs, lectures, bulletins, charts, graphs, photographs, lantern slides, exhibits, motion pictures, the radio, newspaper articles, follow-up literature, and letters.

EVOLUTION OF PROGRAM MAKING

Our present extension system, emphasizing the value of actual demonstrations and participation in the work by farmers, runs back, so far as the Federal Government is concerned, to the printed reports of the United States Department of Agriculture for 1902, when what were termed demonstration experiments were started in several sections of the country. In 1903, the annual report of the Secretary of Agriculture speaks of the establishment of demonstration farms, particularly in the South. These farms had, to quote, "for their object the encouragement of diversified agriculture." They were conducted largely with funds furnished by citizens of the community, the department furnishing expert advice, making the plans, and supervising the work.

MODEL GOVERNMENT FARMS IMPRACTICAL

In this early work, the Federal Department of Agriculture assumed responsibility for planning the demonstration and for doing the work on the farm or seeing that it was done according to plans by a hired agent working under its directions. Something like 50 or more of these demonstration or model farms were established. As a method for getting better agricultural practices established in the counties this type of demonstration did not work out satisfactorily. Farmers did not come in any large numbers to see them, nor did those who came seem sufficiently impressed with what they did see to go back home and introduce the new method on their own farms. As one farmer expressed it, "If I had the Government behind me, I could grow crops too." These Government farms were therefore, for the most part, soon abandoned as teaching agencies. They did not reach and convince enough people to justify the cost.

DEMONSTRATIONS BY FARMERS MORE SUCCESSFUL

It was during this period that the cotton-boll weevil first became a serious menace in the South. How to grow a crop of cotton in the face of boll-weevil infestation was the important question. In this work the Government, instead of establishing its own demonstration farms, got representative farmers to use their own farms and put the responsibility of managing the farm upon the farmer himself. The Federal agent, however, continued to assume responsibility for the plan of work and to keep in close contact with it.

This was a decided step forward from a teaching standpoint. The work was done by a representative farmer under the usual farm conditions; hence other farmers felt more confidence in the work and the farmer himself learned by doing. Furthermore, the Federal agent could spread his work over a wider area and influence more people.

With the inauguration of this plan, it is reported that, in 1904, 5,000 farms in the State of Texas cooperated with the Government in growing cotton according to Government methods. The work was carried on with "demonstrators" and "cooperators." S. A. Knapp, in the Yearbook of the United States Department of Agriculture for 1909, defines these terms as follows:

The term "demonstration farm" is used to designate a portion of land on a farm that is worked strictly according to our instructions. This is visited by an agent as often as once a month, if possible, to see that these instructions are carried out and to give any further advice necessary. A cooperator is a farmer who agrees to work a part or all of his crop according to our instructions.

The cooperator was not visited regularly but was given instructions by mail and was also invited in to the demonstration farms whenever the agents visited such farms.

A characteristic of the work of this period was that it was planned and supervised by the Federal Government. As late as 1911, the annual report of the United States Department of Agriculture states: "During the present season 89,764 men, 55,075 boys, and 3,153 girls are receiving direct instructions from this office." B. T. Galloway, chief of the Bureau of Plant Industry, in referring to this work in the hearings on the agricultural appropriation bill for 1913, spoke of the work as being organized on "almost a semimilitary basis" and as having "accomplished great results."

In the development of the work in the North, responsibility for what was done on an individual farm was shared by the department with the State agricultural college and the farmer from the outset. No one particular problem stood out over a region as needing particular attention, as was the case in the South. Agriculture was already diversified and much good farming was being done. Neither the Federal Department of Agriculture nor the State agricultural colleges had any very concrete knowledge of the outstanding farm problems of any particular community or county. They knew in a general way that farmers were not making much money, but there was no outstanding emergency as regards a particular crop, as in the South.

THE FARM-MANAGEMENT IDEA

In the development of extension work in the counties in the Northern States, therefore, the first step taken was to employ a man with agricultural college training and farm experience, locating him in a county with instructions to study the farm situation. When he found out what the situation was, he was expected to encourage the farmers to undertake such demonstrations as would look toward increasing the net income of the farmer. This agent largely determined the extension program of the county after he had made his study of local conditions.

GOVERNMENT AND PEOPLE COOPERATE

If the change from Government-operated demonstration farms to farmer-operated demonstration farms may be regarded as the first

great forward step in extension teaching methods, either in the North or South, the second great forward step may be regarded as having been taken when the farmers, individually or in groups, were invited to sit in with the agents of the cooperating county, State, and Federal Governments and develop with them an extension program designed to meet the needs of a particular community or county (fig. 16). Just when or where this practice first began is not clearly traceable, but it was in the plans of many extension agents when the Smith-Lever Act first came into effect in 1914, and is now recognized as one of the soundest teaching principles in extension work. This principle has found universal application, in varying degrees, throughout the whole country.



FIG. 16.—Local extension committee and county agricultural agent drawing up an extension program designed to meet the agricultural and home-economic needs of the community. The self-determination of local extension programs is recognized as one of the soundest extension teaching principles, as it puts responsibility for thinking out, deciding upon, and carrying out the program adopted upon the people concerned

This self-determination of the local extension program by the people affected is sound as a principle of teaching because it begins right where people are, physically, mentally, and economically. In application, this principle is mind-stimulating and awakening and is based on the drawing-out instead of the pouring-in process of education. It puts responsibility for thinking out, deciding upon, and carrying out the program adopted upon the people concerned. Extension experience indicates that people grow and make progress about in the proportion that they assume responsibilities and carry out work.

COMMUNITY PROGRAM BUILDING

Where extension agents and people unite in developing a community program, the first step usually is taken by the county extension agent. He learns by talking with farmers, bankers, or others what men or women in a community are outstandingly public-spirited as well as capable farmers and home makers. He may call together 6 to 10 such people to meet in some farmer's home to consider the situation in the community as regards farming, home making, or community matters and whether or not anything can be done to improve the local situation.

As this may be the first time the group ever has been brought together for such purposes, they are guided in the work step by step. After a chairman and secretary have been selected, the county extension agent may inquire what crops or stock or stock products are produced for sale in the community. This is an easy question which all present can readily answer. The answer may be wheat, potatoes, milk, etc. The extension agent may then take up these subjects one by one, asking further questions. In the case of wheat, for example, he may ask what yield per acre those present are getting and the usual yield in the community. The answers may show the yields are running around 15 bushels per acre. The reasons for this relatively low yield are then discussed. Perhaps they are low because of insect injury, or poor varieties, or run-down soil, or growing wheat after wheat too continuously.

At this point, the agent may point out that with a yield of only 15 bushels per acre, farmers get a return barely sufficient to cover cost of production and that profit lies in getting a yield above this quantity. He may report that the State experiment station and many of the better farmers in the county or State are quite regularly getting 25 to 30 bushels per acre on land similar to that in the community. How is it done? The agent answers, for example, by the use of the Red Rock variety, plowing the wheat ground early, seeding a bit late to avoid the Hessian fly, using 250 pounds of a 2-8-2 fertilizer per acre, and growing the wheat in rotation.

After general discussion, those present may decide they would like to see some of these things tried with wheat in the community. Therefore, the matter is put up to them of selecting some one or more of their number to try this improved variety of wheat and to use better cultural methods on a part of their wheatland during the coming season. In this manner, they may discuss the potato situation, the milk situation, and then go on to matters affecting the home and the community: (1) Determining what the situation is; (2) the factors that limit success with each crop, or livestock, or home and community effort; (3) what can be done about it or what the remedy is; (4) what effort shall be made to show the better way, or how many demonstrations shall be put on; (5) just who shall put the demonstrations on; and (6) what help they shall get from the county extension agent or other college specialists and what their own part in the work shall be.

Thus far in the program making for the community, the program is only tentative. If it is to affect the whole community, extension experience has shown that the whole community should know about it. Therefore, the second step in this type of program making is

when the chairman of this first small committee group of farmers calls a community meeting at the schoolhouse or elsewhere to discuss with all the people the tentative program for agricultural, home, and community improvement and to solicit the help of the community in obtaining additional demonstrators. At this larger community meeting the tentative program is accepted or changed in accordance with the wishes of the majority, and out of this meeting comes the final extension program for the community, except as it may have to be modified in accordance with the help it can get from the extension forces of the State in carrying it out.

Many variations from the above plan are in effect in the different sections of the country. Instead of bringing together in the preliminary and community meetings people interested in all phases of agriculture, it may be that only persons interested in one subject, such as dairying or poultry or clothing are brought together in a single meeting, and a program thus worked out for a single group at a time.

Often the making of a program is much less formal than is indicated in this description. The district supervising agent, together with the county agricultural agent and representatives of farmers' organizations of different sections of the county may come together, talk the situation over informally and arrive at a plan of work for the year. The ideal from a teaching standpoint, however, is the community program, developed somewhat along the lines outlined above. By this method the program for the second and following years is a matter of the people of the community and the extension agents coming together, reporting on the work done during the year, considering what shall be continued through the next year, what dropped, and what new work taken up.

The principle of analyzing the problem or problems under consideration with the people and soliciting their counsel on just what phase of the problem to take up, how many demonstrations to put on, who will be the demonstrators, when the work shall be done, what reports shall be made, and like matters, is increasingly being recognized by all extension agents as most desirable and fundamentally sound from a teaching standpoint.

The above plan of community-program making is based on the idea that the extension agents will bring to the meeting the technical information from the agricultural colleges, Federal Department of Agriculture, and like institutions, as well as the result of their own studies and observations in the county, and that the farming people will bring to the meeting an account of the results of their experiences in the neighborhood, a statement of what they believe the problems are, and a list of improvements they would like to see made. Consulting thus together the agents of the Government and the people participating in cooperative extension work arrive at a common plan, which both parties agree to help carry out.

COUNTY AND STATE PROGRAMS

The county program of extension work is evolved out of the sum of the community programs of work, modified in accordance with what assistance may be obtainable from the extension agents, and the State program is essentially the sum of the county programs. State, county, and community programs of work are sometimes

arrived at in another way, though in the final analysis they involve the same principle of participation by the people concerned, as in the simple case of the community program outlined above. To illustrate: In order that the extension agents may sit in with the people in the county, or give to the county in their program making true information, and in order to have the whole plan for agricultural improvement generally understood and supported by all the people, including those who handle the farmers' products, lend the farmer money, and sell the farmer goods, a State program or policy for extension work may first be determined upon.

This State program deals only with broad objectives that should guide or be considered in community program making. It begins usually by the State extension director soliciting the help and advice of each of the subject-matter departments of the college on the status and trend of agriculture in the particular field each department represents. When there have been thus assembled State, national, and world facts regarding wheat, dairying, poultry, prunes, apples, standards of living on the farm, farm-loan interest rates, and other matters, and when tentative conclusions have been arrived at, the State extension director issues a call for a State agricultural conference. To this State conference are invited bankers, business men, representatives of farmers' organizations, commodity associations, and outstanding farm men and women.

When all have assembled at the college, commodity and general committees are appointed to consider the agricultural status of the State and offer suggestions looking toward the improvement of agriculture and rural life. A representative of the corresponding college department is appointed on each commodity or interest committee to place at the disposal of the committee the facts representing the commodity already assembled. These are considered by the committee, deductions are drawn, and recommendations are made. The final conclusions of the committee are then laid before the whole State conference. What is thus approved by the whole conference goes out as the State program for extension work or the State's agricultural policy.

The next step is to take this State program to each county of the State. There again the statistical facts of the county are assembled by local representatives and the extension forces call a county-wide meeting of representatives of the bankers, merchants, farmers' organizations, and outstanding farm men and women. Commodity committees are appointed as before. State facts and county facts are considered and a county program evolved to meet county needs, which is in general harmony with the State program. The communities then develop the community program in the light of what the State and county hold to be sound procedure.

Extension programs thus evolved, whether originating in the community or terminating in the community, have the sound merit of having the full cooperation of the people and interests affected in their determination, in which process the people grow in ability to think out their own problems and meet their own needs. State programs, or policies, as last described, have the further merit of the participation in and presumably, therefore, the approval of all the people of the State concerned in agriculture. This is a decidedly forward step in extension teaching.

REGIONAL PROGRAMS

Some progress also has been made in the development of regional extension programs or policies involving a number of States. In the South, for example, out of years of study, observation, experience, and conference of many different individuals and agencies, a philosophy of farming and extension work has been developed, which is largely crystallized in the writings of S. A. Knapp, and which is now being applied by practically all extension forces and commercial and agricultural agencies. It is "grow your own food and feed." This may be expanded in the cotton-producing sections to "grow your own food and feed and what cotton you can handle." The home demonstration leaders have been largely responsible for an extension program throughout all the Southern States of growing, preserving, standardizing, and marketing garden products.

In the 11 Western States the State extension forces and representatives of the Federal Department of Agriculture have developed a common viewpoint as regards extension work in range livestock, dairying, human nutrition, and agronomy. This was done by each land-grant college taking stock of the knowledge resident in the institution on these subjects, and bringing such facts as each institution had on these subjects to a regional conference of extension directors, extension animal husbandmen, nutrition specialists, and dairymen, held at Fort Collins, Colo., November 5 to 9, 1923. Similarly, agronomic material was brought to the regional conference held at Tucson, Ariz., November 3 to 8, 1924.

Results of studies and research on these same subjects made by representatives of the Federal Department of Agriculture were likewise assembled and brought to these conferences, where appropriate committees pooled all information on these respective lines of work to determine what was available and significant for an extension program, looking toward an improvement of the range livestock industry, human nutrition, dairying, and agronomy.⁴ The recommendations of the Federal and State extension forces on these subjects are finding their way into individual State, county, and community programs, in proportion as the people concerned are impressed with their value.

No attempts at national extension program making have been made, except in war time, when the United States Department of Agriculture, as a war measure, directed the Nation's thought and extension work along certain phases of agriculture.⁵

PROGRAM-MAKING MATERIALLY IMPROVED

In summary, we see the following changes in extension program making in the past 25 years:

- (1) Government owned and operated demonstration farms, which reached and influenced too few people.
- (2) Farmer owned and operated demonstration plats or other demonstration units, following Government plans and directions.
- (3) Farmer owned and operated demonstration plats, or other demonstration units, following plans developed by farmers and agents of Government, counseling and working together.

⁴ For further information see U. S. Dept. Agr. Circ. 308, An extension program in range livestock, dairying, and human nutrition for the Western States, and U. S. Dept. Agr. Circ. 335, An extension program in crop production to reenforce range livestock, dairying, and human nutrition for the Western States.

⁵ See Off. of the Sec. Circ. 103, Agricultural production for 1918, with special reference to spring planting and to livestock, and Off. of the Sec. Circ. 125, Agricultural production for 1919, with special reference to crops and livestock.

Through the counseling together of the agents of cooperating county, State, and National governments, with business interests, representatives of farmers' organizations, individual farmers and farm women, each bringing to the council table the sum total of the facts in their respective fields, information is placed in the hands of the ultimate farm group and individual farmer which enables them to plant more wisely, to cultivate more intelligently, and to handle their produce more in accord with economic laws, and in bringing this about sound principles of teaching are being increasingly observed by extension workers.

NEW TEACHING METHODS EVOLVED

In the past decade there have been three outstanding developments in the giving of subject-matter instruction in extension work: (1) The adaptation of subject matter to what might be called the general receptivity of people; (2) the acceptance of the fact that there are certain known characteristics and laws of the human mind whereby the learning process is experienced; and (3) recognition of various agencies that may be used to give variety and continuity of thought to what is to be extended.

The adaptation of subject matter to the receptivity of the people to whom it is presented began to receive serious thought from extension workers, particularly the extension specialists, when they began to realize that their printed or oral productions were loaded down with words and phrases difficult of understanding outside the scientific laboratory or in a group of professional people. The connection of the specialist with extension teaching is of particular importance when we consider that his relation to the county extension agent has come to be regarded as that of determining what subject matter in his particular line is suitable for extension presentation and by what teaching methods people can be induced to put the recommended methods or improvements into practice. Under this conception of his function the extension specialist has come to share equally with the county extension agent the responsibility for the success or failure of the application of his line of work to local conditions and the adoption of what he advocates into farm practice. The extension specialist to-day is expected to be adept in teaching methods in order to give to the county extension agent the full measure of knowledge and aid the latter requires in effectively extending new subject-matter information.

The development of the written plan of work, made mandatory by a clause in the Smith-Lever Act, did much to clarify the ideas of the extension specialist and supervisory officers as to the method to be pursued in conducting their work. The written plan, also, has guided the specialist in adapting his subject matter to the use of county extension agents and to the receptivity of the people to whom the information is to be extended.

Many plans of the last two or three years have been masterpieces of careful analysis of agricultural or home-economics problems in one or more lines of work in the State, including the object to be obtained, the method of procedure, the cooperating agencies, and the ways for measuring results. The general tendency through this 10-year period has been to select a few general major lines of work, and then to pick out some one or two controlling factors in the problem to be solved and work them into the practice of rural people.

At the end of the 10-year period the methods of approach to people were being thought of by extension workers quite as much as the type of subject matter to be transmitted to them. This thought has given increased recognition to the psychological presentation of subject matter in place of logical presentation from the subject-matter standpoint.

There has come to be a general recognition of the need for a great variety of agencies to be used in presenting an idea in a variety of ways. To that end have come exhibits to reenforce a single idea; tours to see some definite thing; posters with one thought; slogans and couplets whose jingle, either from alliteration, meter, or rhyme make a certain thought stick; movies that give action to the central thought presented; slides that pick out high points of interest; mock trials and debates, clothing the serious thought in a spirit of mirth and fun; and the radio that mystifies. These and other agencies are used to bombard the mind until thought is translated into an approved action.

Professors of education and psychology have been called into extension conferences to instruct specialists, county extension agents, and others as to how the human mind behaves or responds and what the mental characteristics are that determine the acts of the individual. From such information and from experience it has been learned that, in addition to demonstrations, various other agencies for the expression of ideas, as, for example, publications with well-chosen figures of speech and pictorial illustrations, are stimulating in extension teaching to both individual and mass action.

FIELD MEETINGS

Since the beginning of extension work the field meeting at the demonstration has been an important and recognized method of bringing extension results to the attention of farm people and of spreading the influence of the demonstration (fig. 17). To such field meetings the neighbors of the local demonstrator on whose farm the meeting is held are invited. Invitations to attend the meeting are generally given by telephone, post card, newspaper notice, or announcement at some preceding local meeting. The local project leader is usually held responsible for getting an attendance at the meeting with the county extension agent cooperating. If the demonstration is one in crop production, those in attendance inspect the growing crop and the county extension agent or local project leader conducts the discussion of the purpose and results of the type of demonstration in question. The demonstrator himself is usually asked to tell in detail how he has grown the crop, including selection of seed, preparation of seed bed, fertilizers used, planting, cultivation, spraying if required, and the place of the crop in his farming system. This type of program for the field meeting has tended to advertise the demonstration locally and to impress the demonstrator and his neighbors with the importance of the farmer's effort in contributing to the farming knowledge of the community. The field meeting has been used with equal effectiveness in all lines of extension work and with all ages and types of farming people.

TOURS

The tour has been a natural outgrowth of the extension field meeting in the effort to extend the influence of the demonstration as a teaching agency. The development of good roads and the automobile has been particularly favorable to the wide adoption of the tour by extension workers. The tour, usually of one day's duration, is in effect a series of field meetings held in rapid succession. The tour has the advantage over the field meeting of (1) bringing together more people from a wider area to observe the demonstration, and (2) multiplying the number of demonstrations seen in one day, thereby producing an impression of volume of results not obtainable from attendance at a single meeting.



FIG. 17.—A demonstration field meeting at which the county agricultural agent is discussing soybean growing. Such field meetings, at which farmers or farm women are invited to see a demonstration and at the same time hear a discussion of it by the county extension agent and the local demonstrators, have been considered as an important method of spreading the influence of demonstrations.

Originally the tour was more in the nature of a county or community extension rally day. On these annual tours the effort was made to get out a large crowd of those attached to the county extension organization or those friendly to it. In the day's program, it was customary to bring attention to the work of the county extension agents through observing as many different kinds of demonstration as possible during the tour. Public officers of the county, prominent business men, bankers, and representatives of county newspapers were often guests on these tours, the chief end of which was to give publicity to extension work.

More recently the tour has gained extension recognition as a teaching agency. As such it has been organized in a variety of forms, one of which is the commodity or project tour. This type of tour is designed to emphasize and drive home the results obtained over a given period in one line of work, such as work with poultry, with legumes, or in kitchen arrangement. Such tours are usually one-day tours covering all or a part of a community within a county.

A poultry tour, for example, is attended by farmers and their families who are particularly interested in poultry production and is in the nature of a traveling poultry conference (fig. 18). Through it the county extension agent concentrates public attention on the extension results obtained in a county in the improvement of poultry production. From a teaching standpoint he has the advantage of presenting such information as he has to give to an audience particularly interested in the subject. This presentation is reenforced and each farmer impressed by seeing profitable demonstrations of the practices advocated and by hearing the related experience of the demonstrator himself.

Often the State extension specialist takes a prominent part in the commodity or project tour and through it is enabled to render highly



FIG. 18.—Farm men and women on a poultry tour stopping for a demonstration in poultry culling. Automobile tours, which are in reality a series of field meetings held in rapid succession for the purpose of imparting information through profitable demonstrations accompanied by talks, have been found to be very useful in concentrating public attention on extension results, thus spreading the practices advocated

effective service to the county extension agents and to the people of the county interested in his special line of work. In some cases, specialized producers from several counties combine for an intercounty and less frequently for an interstate tour for inspection and study of advanced equipment and methods. The idea of the tour as a traveling conference has also been adopted to a limited extent for groups of extension workers and local leaders in studying new and successful methods of conducting their work.

CAMPAIGNS

Campaigns have been used extensively in extension work both prior to and during the 10-year period. The most frequent purpose of campaigns has been to inform the people of conditions requiring improvement and of ways through which such improvement could be accomplished. After demonstrations on a few farms have shown the practicability of a method or thing, campaigns are frequently put on to bring this fact home and get it adopted by the majority of

the people of the community or county. In many States, "Milk-for-health" campaigns have been successfully conducted. Campaigns similar to the "Live-at-home" campaign of North Carolina calling for 1 cow, 2 pigs, 50 chickens, and a garden on each farm have been conducted in a number of States. County-wide and state-wide campaigns for the eradication of bovine tuberculosis, hog cholera, and insect and rodent pests have been quite common. The clover-prosperity campaign in Missouri, the alfalfa-dairy campaign in Michigan, and the lime-legume-alfalfa campaign in Kansas are examples of the application of the campaign to agricultural improvement.

More recently the definitely organized educational campaign has come into use in the extension field. This type of campaign has centered around the adoption into general farm usage of some economical and profitable although relatively simple practice. The following procedure is typical of that followed in such campaigns, varying of course with the locality in which a campaign is conducted:

- (1) A solution for a local problem that is economical and profitable and that the people might be reasonably expected to adopt.
- (2) Reduction of subject matter to teaching it in terms of a single practice.
- (3) Carrying on a fairly large number of simple demonstrations placed at representative and strategic points in a county.
- (4) Visits or tours to these demonstrations to see comparative results.
- (5) Accurate records which testify in no uncertain terms to the worth of the practice.
- (6) Publicity during this period to inform the people of the progress of the work and the results.
- (7) Definite attempt to obtain pledges of people to adopt the practice demonstrated. This may be done by—
 - (a) Distributing pledges at program-planning meetings where results of demonstrations are outlined by demonstrators.
 - (b) Distributing pledges through project leaders at demonstration meetings where results of demonstrations are outlined by demonstrators.
 - (c) Using circular letters announcing results of demonstrations and enclosing campaign-enrollment cards.
 - (d) Personal solicitation by project leaders.
 - (e) Proper publicity.
 - (f) Development of pools to order necessary supplies.

CONTESTS AND SCORE CARDS

Contests have been extensively used in promoting extension teaching during the 10-year period. Early crop work was largely in the nature of an educational contest among individual farm boys and girls with cash prizes as the incentive. More recently the emphasis in these contests has been placed on the achievement of the club group rather than that of the individual club member. With this change, the distinction achieved rather than the cash prize has become the main incentive.

The use of the contest idea has not been restricted to club work alone. Contests among adults have been equally effective in obtaining response to extension work in the form of adopted practices. Production contests, such as growing corn on 5 or 10 acres, have been practiced with men. Among the farm women, better-bread, better-butter, and better-kitchen contests have been particularly productive of results. The idea has also been extended to contests among communities. In such contests, the communities competing are scored on the basis of economic and educational conditions, resulting in marked improvement in the competing communities.

In contests and also as a means of measuring the standing of the individual, the score card has been most helpful as an aid in extension teaching. Also widely used in scoring exhibits and livestock from the early days of extension work, the score card has found an even more important place in its application to the farm family and the farm home. Score cards have been developed as a measure of the health of the child, the efficiency and attractiveness of the kitchen and the living room, of family food habits, and of the general condition and growth of farm children. Both mothers and children have been found particularly interested in the use of the score cards as a measure of development.

SHORT COURSES AND CAMPS

Short courses and camps in increasing numbers have served as a means of giving practical information in agriculture and home eco-



FIG. 19.—Canning team giving a demonstration at a short course. Boys and girls at short courses or camps are given opportunity to receive practical information in agriculture and home economics, to become acquainted with the information available from their State agricultural colleges, to take part in recreation and other health activities, and to meet enterprising and successful farm boys and girls from other parts of the State. As a result, they return home refreshed in body, mentally stimulated, and spiritually inspired

nomics to extension groups (fig. 19). Such instruction has been combined with social and recreational features characteristic of camp life. Annual short-course week for boys' and girls' club members at the State agricultural college has become an established practice in most States. Such short courses serve as a most effective means of acquainting farm boys and girls with the resources of the State agricultural college and as a dependable source of information and assistance. Similar short courses or farmers' weeks for both farmers and farm women are held in a majority of the States. County, district, and State camps for boys' and girls' clubs have supplemented the short course at the State agricultural college for a number of years. More recently, camps for farm women of from three to six days' duration have been held with success in most States and have met with appreciation.

TEAM DEMONSTRATIONS

A thoroughly characteristic development in extension teaching methods has been the organization of team demonstrations as a means of presenting extension facts at public gatherings. The demonstration team has been used mainly in the field of club work and home demonstration. The team, consisting of from two to four members, is trained to demonstrate one simple and effective method applicable to ordinary farm or home practices. The type of demonstration given usually has seasonal as well as local application. Such practices as sorting and grading potatoes, cutting and fitting dresses, canning vegetables, and culling poultry are typical examples of practices demonstrated by such teams.

FARMERS' INSTITUTES

The significant changes in farmers' institute work since the passage of the Smith-Lever Act in 1914 have been the gradual transfer of responsibility for the institutes from the State department of agriculture or other special agency to the State agricultural college and the steady decrease in the amount of institute work done. In 1915, 24 State agricultural colleges were charged with conducting farmers' institutes. In 1924, such responsibility rested with the agricultural colleges in 42 States. In 1915, 21,241 institute sessions were held in 48 States, with 2,824,716 persons in attendance. In 1924, 10,387 such sessions were held in 22 States, with an attendance of 1,474,966.

During the fiscal year ended June 30, 1924, farmers' institutes were officially conducted in 22 States. In 16 of these States, the institutes were conducted under the direction of the State agricultural colleges and in the remaining 6 by the State department of agriculture or special farmers' institute agency. The 16 agricultural colleges reported a total of 7,578 sessions, attended by 1,062,709 persons. Four hundred fifty lecturers from the colleges and 256 from other sources were employed at a total cost of \$98,867.03.

The 6 States conducting institutes through some other agency than the State agricultural college reported 2,809 sessions, with an attendance of 412,257. Two hundred seventy-one lecturers from the college and 240 from other sources were employed at a total cost of \$22,341.01.

On farmers' institute work in 1924, 1,217 lecturers were employed, and the total funds involved were \$121,208.04, approximately three-fourths of which came from State sources and one-fourth from local sources. A detailed statement of farmers' institute activities is given in Tables 5 and 6 on pages 108 and 109.

DEVELOPMENT OF PUBLICATIONS, VISUAL PRESENTATION, AND RADIO

The first 10 years of cooperative extension instruction has witnessed the development of a type of publication and press material particularly fitted to capitalize and strengthen the influence of the demonstration and the extension worker. The publication usually has taken the form of the popular bulletin, circular, or leaflet, well illustrated with photographs or drawings and carrying practical directions for improved farm or farm-home practices. Contribu-

tions to the rural and city press, to farm papers, and to magazines and business journals have constituted the extension press material.

The development of publications and press material has been accompanied by a somewhat slower but consistent growth in the use of other visual aids in capitalizing the demonstration and extending its influence. Photographs, lantern slides, charts, posters, and various types of exhibits have found new uses and adaptations in extension teaching. The educational motion picture has been developed in this period and is recognized as a powerful influence in creating public sentiment favorable to improved conditions. The most recent agency recruited to the extension cause is the radio and through it the human voice has added the forces of magnetism and mystery to the appeal of the written word and the pictured practice as aids to the demonstration and the personality of the extension worker.

PUBLICATIONS STRENGTHEN EXTENSION APPEAL

In the field of publications, there has been a rapid and uniform development toward clarity and simplicity of presentation, attractive make-up and typography, appropriate and illuminating illustrations, and an appealing cover page (fig. 20). Every art of the printer to accentuate the appeal and induce the practice of what the publication teaches has been increasingly brought into play. The subject matter content of extension publications, likewise, has become more specific and per-

tinent, accurately incorporating the latest results of scientific research.

With the advent of this type of publication, the function and characteristics of the agricultural college editor have likewise undergone modification. Once largely concerned with accuracy of fact and expression and with economy in arrangement, the editor has acquired, in addition, ability to think of prospective readers in terms of their own experience, tastes, and aptitude for putting suggestions into practice. He tends to keep constantly before him, and

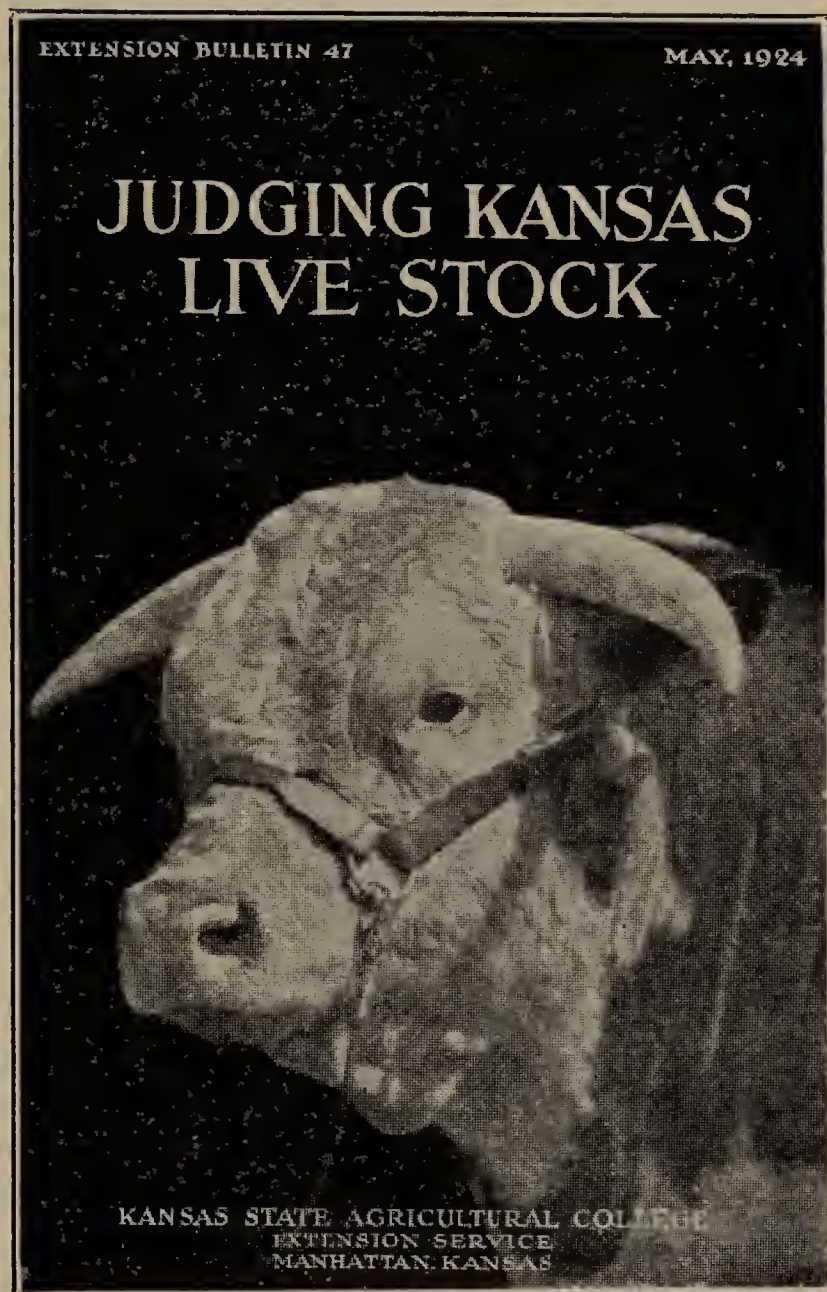


FIG. 20.—An appealing cover page of a State extension publication which recognizes that the attitude of the reader often depends upon his first impression. Through the use of attractive cover pages, clear and simple presentation of subject matter, appropriate and illuminating illustrations, and readable type, State extension editors have accomplished much in strengthening the extension appeal of publications

before other extension workers who are authors of such publications, certain questions which measure the usefulness of the modern extension publication. Provided the facts and the language used are accurate, is the wording simple and direct enough to be understood readily by the average farmer without a scientific background and vocabulary? Are the make-up and illustrations such as to appeal to the taste of the farm reader and illuminate the text? Is the presentation attractive, forceful, and convincing enough to overcome lack of aptitude or disinclination for putting suggestions into practice? The fact that editors of extension publications generally are asking these questions in the preparation of a publication, in addition to giving attention to the fundamentals of accuracy in fact and expression, probably is the most convincing measure of the progress made in the last 10 years in preparing publications effective in cooperative extension.

During 1924 the State extension divisions published in the interest of extension work, 1,365 printed documents, consisting of 348 bulletins, 288 circulars, and 729 miscellaneous publications. The Office of Cooperative Extension Work prepared and printed a report on cooperative extension work for the year 1922 and 10 department circulars, of which 7 outlined extension organization and teaching methods found to be successful by extension agents and results of extension activities during the year 1922, 2 were devoted to an extension program adopted by the Western States, and 1 contained financial statistics for the fiscal year 1923-24.

NEWS SUPERSEDES PROPAGANDA

The recorded development of the extension news service during the 10-year period has been most remarkable. With a few notable exceptions, the State college of agriculture at the beginning of this period tended to regard the press largely as a means of disseminating propaganda regarding the needs and work of the institution. Cooperative extension on the farm and in the farm home brought into existence the vital human element needed to make real news of the subject matter developed by the colleges. The successes of the farm man or woman or of the boy or girl influenced by cooperative extension—what they have done, how they did it, and who helped them—was valuable news, not only in the local country paper but eventually in the whole field of the press. As individuals and, later, groups of farmers and farm women began to improve production and marketing methods and to develop more satisfying living conditions, their achievements and progress became real news for both the rural and city press. Stories of what farm men and women had accomplished through cooperative extension and the methods practiced by them have found their way more and more frequently into farm papers, popular magazines, and business journals, capitalizing and spreading the influence of the demonstration.

The most recent development in the news field has been the aid extended the county extension agents and others by the editors in State extension divisions in developing and perfecting a county extension news service. This service has taken the form of personal visits to individual agents by the editor and of discussions guided by the editor at district conferences of extension agents. In some

cases, special county or district conferences of extension agents editors of local papers, and leading farmers, farm women, and business men, have been held to the same end. Correspondence courses in news writing have been offered to county correspondents as well as to extension workers as a supplemental source of extension news.

Practically every State extension division now maintains as part of its news service a mimeographed or printed news sheet, an extension news periodical or house organ, and a special service to leading city dailies and farm papers. In a number of States this service is supplemented weekly by a sheet of short paragraphs on timely topics, a more or less regular picture service in farm papers and the city press, and the preparation of feature articles for farm papers, popular magazines, and business journals.

The development of both publications and news service during this period has been more rapid and uniform because of the activity of the American Association of Agricultural College Editors in bringing regularly and systematically to the general attention of its membership new methods of presentation and appeal.

No complete record is available of the total number of news articles and items prepared by State extension divisions. In preparing press material on extension work from a national standpoint, the Office of Cooperative Extension Work cooperated with the Press Service in assembling and preparing 320 articles for the Official Record and for press release.

VISUAL PRESENTATION BASIC IN EXTENSION TEACHING

The visual presentation of information leading to improved practices on the farm and in the farm home has been the basis of successful cooperative extension education since its beginning. The extension demonstration itself is a form of visual presentation vitally reenforced through being a part of the practical experience of the farmers and farm women who are the demonstrators. In whatever form the story of the successful demonstration has been spread, whether through word of mouth, the printed publication, or the exhibit, the degree to which the demonstration has convinced and obtained the adoption of similar practices has been measurably dependent on the extent to which visual aids to such presentation has been employed. In consequence, extension workers generally have turned their attention toward developing more effective methods of presenting extension information through (1) talks at committee meetings, (2) reading matter either in the form of a printed publication or in local or farm papers, and (3) the display of various types of exhibits and posters.

There appears to be a general realization that with over \$19,000,000 invested annually in cooperative extension work, a distinct effort should be made to capitalize the time, energy, and funds invested in the establishment of demonstrations by widening the spread of their influence and obtaining a more general adoption of the practices demonstrated. In this effort, definite thought has been directed by the several State extension divisions and the department toward the effective use of visual aids in presenting the story of the demonstration to that large audience of farm people which can be reached and influenced through talks at community meetings, reading matter, and exhibits at fairs and other public gathering places.

PICTURIZATION OF THOUGHT FINDS EXTENSION APPLICATION

In extension experience, photographs have ranked high among visual aids in the variety of educational uses to which they lend themselves. Particularly have they been found useful in explaining methods advocated to the large number of adults as well as children in any community who do not readily assimilate ideas as expressed in reading matter or the extension talk. This experience is in line with the general trend of the public mind in the last decade toward the picturization of thought. First, the pictorial supplement appeared in the Sunday newspaper, presumably on the theory that, when the public had leisure for reading, pictures enhanced its tendency to read. Then came the motion picture, which in a brief space revolutionized the entertainment of the bulk of the population and estab-



FIG. 21.—A carefully planned and staged photograph embodying all essentials necessary to this form of extension teaching. In addition to illuminating the text of publications and news articles, appropriate photographs in the form of lantern slides, charts, enlargements, and posters have been found to be especially useful in reenforcing the talks of extension workers

lished picturization as a standard method of appeal to the intelligence and sympathies of the public. More recent has been the addition to the city daily of a page or half page giving the news of the day in pictures. With this innovation, the picture ceased to be an ornamental appendage to reading matter and was established as a necessary and accepted method of informing people more intelligently of facts they desired or needed to know.

This condition, either consciously or unconsciously, led to the more liberal and systematic use of photographs as illustrations in extension publications and news material. With this use came the realization that the picture or pictures must be carefully planned and staged, if they were to aid vitally in telling the extension story (fig. 21). With the development of this idea, photographs available for use in illustrating news articles for the farm papers, popular magazines, and the

farm columns or sections of the rural and city press have increased in number and have aided materially in obtaining the wider and much more frequent use of extension news in such mediums.

In giving extension talks, photographs in the form of lantern slides and enlargements, together with charts and educational posters, have apparently only begun to find their place of usefulness among visual aids to extension teaching. There has developed, particularly, a demand for such material properly organized and selected for the use of voluntary county and community leaders in extension education. In the effort to appeal more convincingly through extension talks, the thought of extension workers, as was the case in the preparation of extension publications and news articles, was turned toward the preparation and selection of lantern slides, charts, enlargements, and posters that would really reenforce and illuminate their talks. With this thought dominating, greater discrimination has been developed in the selection of material appropriate to the intelligence and experience of the audience to be addressed. Instead of using a large number of slides or charts, tending to confuse and bewilder the audience, the trend has been toward the use of only as many carefully selected charts or slides as are needed to tell the story. The effort has been made to simplify the ideas presented in chart or slide form. One step in a process or method is shown in the single slide or illustrated chart. The recent commercial invention of putting slide series on film is already finding extension use and because of lessened expense for production and transportation as compared to standard glass slides, indications are that a wider extension use of pictures and drawings will be made in this form.

MOTION PICTURES AROUSE CONSTRUCTIVE INTEREST

The motion picture in the 10-year period has a record of invaluable service in arousing public sentiment and turning the thought of rural people toward outstanding conditions requiring concerted action within a county or community. It has been particularly helpful in the fight against bovine tuberculosis, in the control of the cattle tick, in promoting farm sanitation, and in other efforts affecting the health of rural people. It has performed effectively the function of calling attention to progressive movements in the extension field and has kept the general public better informed regarding agricultural matters than would have been otherwise possible.

Judiciously used, the motion picture has been reported as having in numerous instances put an indifferent, and, sometimes, hostile audience in a receptive frame of mind for the information given in the talk by the extension worker following the exhibition of the picture. Like the news article, the motion picture has lent itself to the telling of the human-interest extension story, and the lantern slide and chart have served the more prosaic but none the less essential function of the extension bulletin by telling how the practice advocated should be carried out. The motion picture also can be credited with contributing to the increased use of lantern slides, charts, and other visual material by extension workers in the 10-year period.

EXHIBITS REENFORCE EXTENSION TEACHING

The adaptation of exhibits to use in cooperative extension work has been one of the striking developments of the new teaching.

The making of fair exhibits, in particular, has been stimulated. As a result, displays of farm and farm-home products by communities or local farm organizations at State and county fairs have become quite general, and the holding of community shows especially has been fostered by extension agents. The fact that the making of an exhibit has been a requirement in the work of boys' and girls' club members stimulated such exhibits more than any other thing. This type of exhibit is in keeping with the spirit of cooperative extension, in that it involves the voluntary effort and participation of a large number of farming people in any community making an exhibit.

Another way in which the human element has been introduced into the exhibit is thoroughly characteristic of cooperative extension education. Voluntary demonstrators—men and women and boys and girls—have been used to humanize exhibits. Such demonstrators stage at regular intervals various improved methods of doing things, such as selecting seed corn, making bread, canning vegetables, and judging livestock. The demonstration teams of boys' and girls' clubs, now numbering thousands annually, are an outgrowth of this idea. At one interstate fair, a stage fully equipped with drop curtains and scenery has been built and each demonstration by a club team constitutes a separate act in a morning or afternoon program, centering around some general theme, such as field crops, livestock, or home management.

The number of such exhibits and of local shows has increased steadily from year to year in the 10-year period, more and more emphasis having been laid on the holding of local community shows. For the most part, extension attention has been directed chiefly to improving the quality and arrangement of the products exhibited and to increasing the number of exhibitors in any community putting on a show. More recently attention has been directed to the effective placarding of exhibits at community and county shows. The realization has come to extension workers that the time and effort expended in getting together large and creditable exhibits has not been fully capitalized from an advertising standpoint. This has often been because such exhibits have not been suitably placarded. Another recent development in the exhibit field, largely at State and interstate fairs and to some extent at county fairs, has been the idea of putting in exhibit form the human-interest extension news story. In such an exhibit the personality and extension achievements of the individual man or woman, boy or girl, are made the theme of the exhibit, and, through the story told of such achievement, the extension lesson is taught.

What may be termed the institutional exhibits of the State colleges of agriculture or their extension divisions have likewise developed in the same manner as extension publications; namely, along the line of presenting subject matter in a simple and convincing way. In the earlier part of the 10-year period, most institutional exhibits were faithful reflections of the equipment and needs of the subject-matter departments of the colleges. The product was something on the order of a subject-matter short course in exhibit form. Everything the department did or thought was pictured there in a confusing mass of exhibit charts and specimens. Presently, in a number of States, the principles of cooperative extension began to show in the

preparation of such exhibits. It began to take on more of the extension and less of the institutional aspect. It was recognized that at a fair people passed rapidly from exhibit to exhibit and had neither the inclination nor sufficient time to digest details or matter removed from their immediate experience and possible application. As a result, the agronomy extension specialist, for instance, instead of attempting to cover the whole field of crops in one exhibit, began to single out one crop or idea about which to center his exhibit for the current year, such as soybean introduction or the control of oat smut. The next step was to put a positive appeal into such exhibit



FIG. 22.—A simple and convincing extension exhibit illustrating one idea and containing a positive appeal. Good extension exhibits attract attention, arouse interest, and influence people to think and finally to put into use on the farm or in the home the approved practices suggested

presentation. The exhibit, instead of being built about such ideas as "lime and its uses" or "the control of the boll weevil," came to suggest in a plain, direct way "use lime" or "poison the weevil." (Fig. 22.) This trend of thought in the preparation of extension exhibits is far from being universally practiced, even after 10 years of cooperative extension; but reports of exhibits made in the last two years indicate a steady drift toward simpler and more convincing exhibits closely related to the extension program.

RECORDED USE OF VISUAL AIDS

Reports from county extension agents show that in 1924 lantern slides were used at 8,834 meetings, charts at 24,147 meetings, and

motion pictures at 28,856 meetings. The Office of Cooperative Extension Work in 1924 cooperated with State extension divisions in taking a total of 1,129 field and 104 laboratory photographs. Twelve States were visited by the personnel of the visual instruction and editorial section of the office for the purpose of giving instruction at extension conferences in methods of extension photography and the use of visual aids. More than 33,000 prints, slides, enlargements, charts, posters, and drawings were requested and prepared for use in extension work through the Office of Cooperative Extension Work, and 749 sets of lantern slides prepared in series and accompanied by supplementary outlines on 75 different subjects were lent for extension use through State directors of extension.

The Office of Motion Pictures has become one of the largest producers of educational films, having available 1,862 reels of films comprising 213 different subjects. Approximately 1,500 reels have been bought and are being circulated by State extension services and other institutions. During 1924, department films were exhibited to a reported audience of more than 3,000,000 people, many of whom were extension workers. Unreported audiences and those viewing films purchased from the department probably would increase this number to 8,000,000 or 9,000,000. Requests for 2,324 educational films from extension workers were filled. The department produced 28 new motion pictures, including two illustrating cooperative extension work, which were prepared in cooperation with the Office of Cooperative Extension Work, as follows: "Touring with the Grangers" and "A Crop Worth Saving."

In the exhibit field, as a result of the conference of western extension directors, the department office of exhibits prepared in 1924 in cooperation with the western directors a series of exhibits related to the extension program adopted for that region for joint exhibition at State and interstate fairs in the States represented.

RADIO FINDS EXTENSION ADAPTATION

The most recent aid to cooperative extension education is the radio. Unknown at the beginning of the 10-year period, it has come into wide use by the American public. So rapid has been its development as a means of entertaining and instructing the public that its possibilities as a helpful extension agency have been hardly comprehended. Although broadcasting stations are now maintained by 26 State colleges of agriculture, the program rendered in many instances is institutional rather than extension in character. The radio market news and weather services, however, originating with the Bureau of Agricultural Economics and the Weather Bureau, have had a distinct extension application and are reported as having materially aided the extension agent in rendering service to the people of his county. (Fig. 23.)

The last two years have witnessed experiments by several State extension divisions in broadcasting extension programs to rural communities or special talks or addresses on request to local community meetings, where the broadcast talk was one of the numbers in a program otherwise made up from local talent. The idea of the college of the air, originated and most fully developed by the Kansas extension divisions, is one of the advanced developments in extension radio. Under the Kansas plan, individual farmers and farm

women are enrolled as radio students in short courses covering various subjects, such as child feeding, poultry management, and forage production. The student hears a lecture by radio and on the following morning a mimeographed copy of the talk or lecture is mailed to him. In this case the radio serves to vitalize through the agency of the human voice what would otherwise be an ordinary correspondence course. This humanization of a method of instructing people is a characteristic extension attribute. Taking into consideration the present physical limitations of the radio, the opinion prevails at the present time that this plan can be worked successfully in only a limited number of States. Indications are, however, that extension application of broadcasting the human voice with further mechanical development and refinement will give the radio a permanent and probably highly influential place as an extension medium.

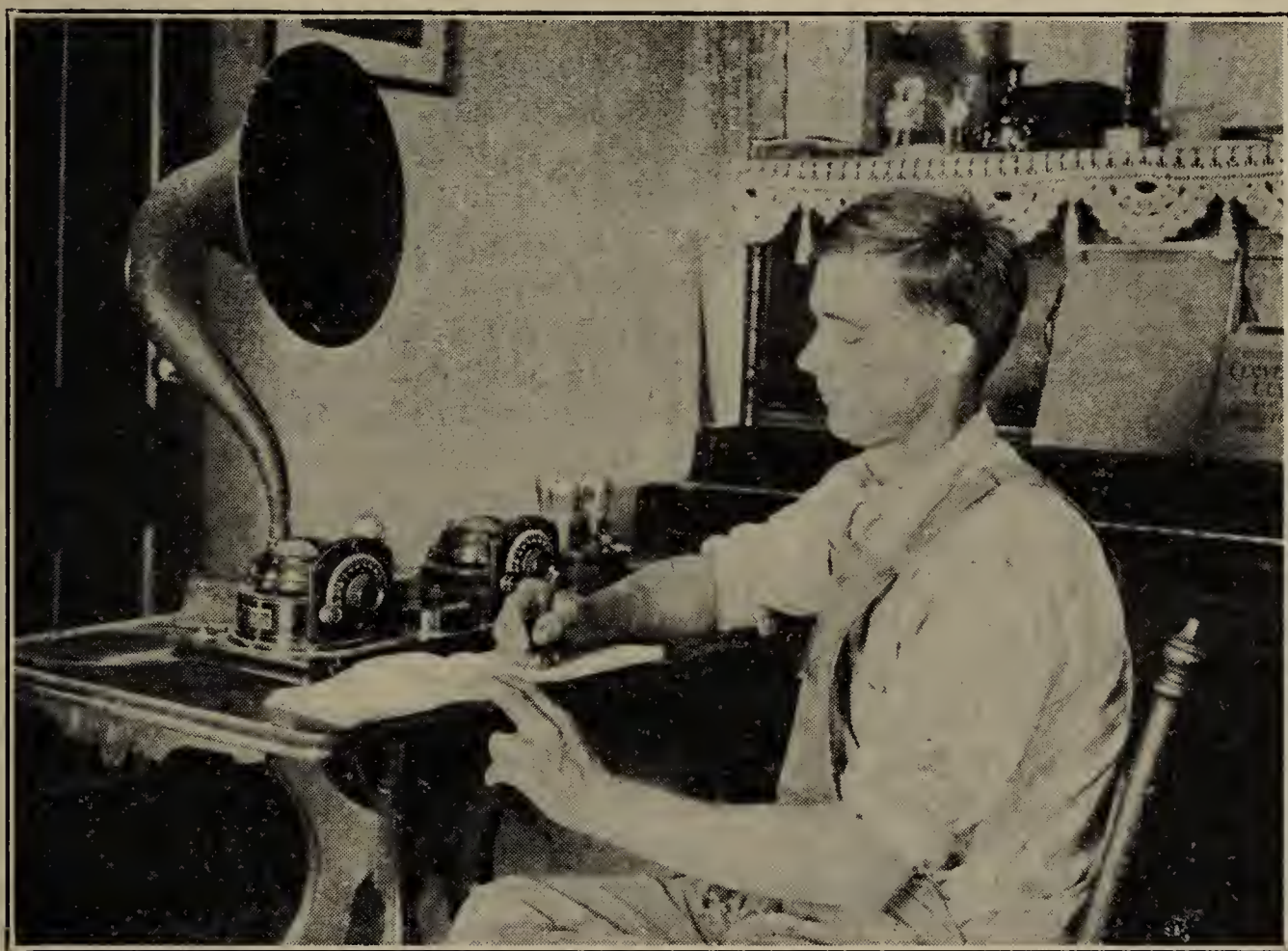


FIG. 23.—Farmer receiving market reports being broadcast by radio. In carrying direct to the farmer and farm woman talks on agriculture and home economics, weather, market, and crop reports, and other information of value on the farm, the radio has proved to be a distinct adjunct to extension teaching

The present limitations of radio from an extension standpoint at the end of the 10-year period are the initial cost of installing a high-powered efficient broadcasting station, the rapid obsolescence of such equipment in the present stage of radio development, and the lack of training and experience on the part of extension personnel to develop the extension application of radio. Many extension divisions have contented themselves with contributing speakers to the programs of local commercial broadcasting stations. This service has been furnished in some cases at regular intervals and in others only on special occasions; however, it is apparently only a question of time when the possibilities and limitations of radio as an aid to cooperative extension work will be clearly defined.

In 1924 the following 26 States were equipped with broadcasting stations: Maine, Vermont, Connecticut, New York, Pennsylvania,

South Carolina, Alabama, Ohio, Michigan, Indiana, Illinois, Wisconsin, Iowa, Missouri, Arkansas, Louisiana, Texas, Kansas, Nebraska, South Dakota, North Dakota, New Mexico, Arizona, Idaho, Washington, and Oregon.

Data obtained from a questionnaire issued cooperatively by the Bureau of Agricultural Economics and the Office of Cooperative Extension Work of the department regarding the use and value of the radio in extension work, which was sent to all county agricultural agents, showed that of 944 agents making replies, 151 had radio receiving sets and 482 had access to radio receiving sets. From data obtained from the questionnaires, it is estimated that about 370,000 farm families were using radio receiving sets in 1924.

CONFERENCES

Since the enactment of the Smith-Lever Act, national and regional conferences of directors, county agricultural agents, home demonstration agents, and club leaders have been held at varying intervals. It was not until 1920, however, that a national or regional conference of subject-matter extension specialists was held. This was a meeting of farm-management specialists at Washington, D. C., at which both subject-matter and extension methods were discussed. Following this meeting, other conferences have been held on horticulture, dairying, soils and crops, nutrition, and animal husbandry. At most of them methods of organizing and conducting extension work were discussed. Those held in the far Western States in 1923 and 1924 were for the purpose of formulating a regional program.

The various professional groups, such as the Society for the Advancement of Horticultural Science, the American Society of Agronomy, and other agricultural and home-economics professional groups, are rapidly organizing extension sections, whose programs are in the main concerning types of organization and methods of conducting the work. All types of conferences have given a degree of similarity to the organization and the methods used among extension workers. They have also developed an acquaintance among extension workers, which has brought about the cultivation of a sympathy and interest for each other's work that could not have resulted under conditions of isolation.

COUNTY AGRICULTURAL AGENT WORK

ORIGIN DUE TO BOLL-WEEVIL INFESTATION

Farmers' cooperative demonstration work, now more commonly known as county agricultural agent work, was begun in 1903, by the Bureau of Plant Industry of the United States Department of Agriculture. "Demonstration work to show the value of improved cultural methods by which farmers could produce fair crops in spite of the weevil," as described in a department publication of that period, one of a number of activities begun at this time in Texas and Louisiana, for which the Secretary of Agriculture had obtained funds and authority in order to meet the emergency caused by the ravages of the Mexican cotton-boll weevil, was regarded by the Secretary as offering the most promise for relief from existing conditions of any of the proposed activities.

HOW FIRST DEMONSTRATIONS WERE CONDUCTED

Under working plans provided by the department, individual farmers, known as demonstrators, handled at their own expense, tracts of 5 or more acres of cotton on their own farms. At first, seed and sometimes fertilizers were furnished for the demonstration as an inducement to undertake the work and make reports. Demonstrators were assisted in carrying out plans through frequent visits of department agents. Other farmers, agreeing to follow the same methods on their farms, were known as cooperators. These were instructed by mail and personally at field meetings held on the demonstration farms. Reports were made, records were kept, and publicity was given to the results obtained.

This plan of obtaining the adoption of improved methods of crop production in the cotton-growing States was conceived and developed by Seaman A. Knapp of the United States Department of Agriculture. For several years previous to 1903, he had supervised a number of farms for testing and demonstrating new varieties of rice, legumes, and other crops in various parts of the South. These were simply local department field stations with salaried resident agents in charge. They did not satisfactorily meet the need which Doctor Knapp saw for a more effective means of reaching people and influencing them to adopt better agricultural methods than had been possible up to that time by bulletins, institutes, model farms, or other extension methods in use. The first trial of the new demonstration idea was a farm which he designated as a "community demonstration farm," established and supervised by him at Terrell, Tex., in 1903. The department's active campaign against the boll weevil, which began in the following year, afforded an opportunity to test the application of this demonstration-farm idea on a large scale. It was immediately and strikingly successful. Railroads, chambers of commerce, and other organizations, State and county officials, leading bankers, business men, and farmers were won to the active support of the movement. During the first year, 8,000 farmers were enrolled in Texas as demonstrators and cooperators. In the following year, with the further spread of the weevil, work was begun in Arkansas and Oklahoma. Demonstrations in the improved production of corn, cowpeas, and other staple crops of the region were soon undertaken in addition to cotton.

GENERAL EDUCATION BOARD COOPERATES

The General Education Board of the Rockefeller Foundation, the well-known philanthropic organization devoted to the spread of education, became interested in the farmers' cooperative demonstration work in the course of an inquiry by them to discover the most effective method of teaching improved agricultural practices to farmers. In demonstration work, the board stated that it had found an answer to its search. The General Education Board offered funds to extend similar work into territory not infested by the boll weevil, leaving the management and control entirely with the United States Department of Agriculture. A cooperative agreement to this effect was signed by the secretary of the board and the Secretary of Agriculture, April 20, 1906. Work thereunder was begun immediately in Mississippi, Alabama, and Virginia and, during the following two or three years, was extended to the other Southern States not yet infested with the boll weevil.

Cooperation with the board was terminated June 30, 1914. Up to that time it had expended a total of \$863,250 in promoting demonstration work in the Southern States. Due to the emphasis it placed on the educational application of the demonstration idea, and the immediate and rapid expansion of the demonstration movement, which its cooperation brought about, the activity of the General Education Board was an important factor in establishing demonstration work as a system of agricultural education throughout the country.

THE FIRST COUNTY AGRICULTURAL AGENTS

During the early years the department agents were assigned to districts containing 10 to 20 counties and paid entirely from Federal or General Education Board funds. Intensive work was soon requested by the more progressive counties. It was offered on the basis of local cooperation in paying the salaries of agents whose work should be confined to limited territories. In Smith County, Tex., funds were raised by subscription and W. C. Stallings was appointed in November, 1906, as the first agent in the United States whose work was confined to a single county. Within the next few months business men and farmers in five other counties in Texas and two in Louisiana similarly provided for the employment of a county agricultural agent. County agricultural agents were also employed in a few counties in Alabama, Arkansas, and Mississippi during the fiscal year 1907-8 and the number of such agents increased in Texas and Louisiana.

In 1908, Mississippi enacted a law authorizing the use of county funds for the employment of county agricultural agents in cooperation with the United States Department of Agriculture. Similar laws were passed in practically all the Southern States during the following year or two. In Alabama and one or two other States, State appropriations for demonstration work were also made. By 1909, the organization for carrying on county agricultural agent work had expanded to practically its present form. It consisted of a special agent (director) in general charge, with a corps of assistants, located in the Federal Department of Agriculture and paid from general funds; State agent in direct charge of county agricultural agent work; district agents; and a rapidly increasing number of county agricultural agents, all cooperatively employed, in each of the cotton-growing States.

EARLY GROWTH RAPID

County agricultural agent work now grew rapidly in States already organized and also spread to other Southern States. Work was financed from General Education Board funds in Georgia, North Carolina, and South Carolina in 1908, in Florida in 1909, and from department funds in Tennessee in 1910. The distinction between territories in which department and General Education Board funds were expended, except as to work with women and girls, was maintained consistently. The work was carried on with department funds in all territory infested or immediately threatened with infestation by the boll weevil and work in noninfested areas was financed by the General Education Board. As the boll weevil advanced into Mississippi, Alabama, Florida, and southern Georgia, work in these States previously conducted with General Education Board funds was taken over on Federal funds.

In 1907 a boys' corn club was organized in Holmes County, Miss., and in 1909 this feature of the work was taken up in other States on a uniform plan. The basis of production was one acre, so that each boy became a demonstrator of better practices in corn growing. The boys' corn-club movement rapidly attained great popularity and, as with adult work, was soon enlarged in scope to include several kinds of crop and animal clubs.

ORGANIZATION OF EXTENSION IN THE SOUTH

During the early years of farmers' cooperative demonstration work in the South, it was conducted under the exclusive direction of the United States Department of Agriculture. The agricultural colleges and experiment stations in most States cooperated informally, assisting the movement in many ways, but did not contribute to its financial support or share directly in its administration. In most States direct participation began with the organization of boys' corn clubs. In Alabama, Arkansas, Mississippi, and Georgia, cooperative agreements for the supervision of boys' club work were entered into in 1909, and State boys' club agents were appointed as joint representatives of the State agricultural colleges and the United States Department of Agriculture. Similar agreements were made with the State agricultural colleges in most of the other Southern States within the next year or two.

Clemson Agricultural College of South Carolina was the first to enter into a cooperative agreement with the United States Department of Agriculture providing for the joint supervision of all lines of demonstration work conducted in the State. The agreement was formally signed in January, 1912. A similar agreement was executed during the same year with the State agricultural colleges of Texas and Georgia and with those of Florida, West Virginia, and North Carolina in 1913.

On June 30, 1914, farmers' cooperative demonstration work, organized in 15 Southern States, employed a total of 1,151 State, district, and county men and women agents and specialists. The total expenditures for the fiscal year ended on that date was \$970,479.49, apportioned as follows: \$371,800.28 of department funds, \$187,500 of General Education Board funds, and \$411,179.21 of county funds.

DEVELOPMENT IN NORTHERN AND WESTERN STATES

The employment of county agricultural agents in other sections of the country was inspired by the popularity and success of work in the South and came about through the evolution of the farm-management work of the Bureau of Plant Industry and through the initiative of private organizations and individuals. The Office of Farm Management was created in 1906-7 in the Bureau of Plant Industry with W. J. Spillman as chief to conduct on an enlarged scale work begun by that bureau a few years earlier. It had authority and funds to investigate and encourage the adoption of improved methods of farm management and farm practice. Agents were placed in districts, usually comprising two or more States, to investigate farm-management problems and to study the prevailing types of farming. Bulletins, farmers' institutes, newspaper publicity, demonstration tests, and field meetings on typical farms were some of the extension methods used to encourage the wider adoption of

the more profitable types of farming and improved farm practices. Within a few years all the States were included in such farm-management districts. The work expanded, as subdistricts in charge of assistant farm-management agents were created. Farm-management work was usually conducted in cooperation with the State experiment stations and, wherever possible, with organizations of farmers.

The evolution of this work was in the same direction as that of the farmers' cooperative demonstrations carried on in the South. Demonstration tests of new varieties of corn, legumes, and the like, on individual farms, under the supervision of a farm-management agent, were begun in cooperation with the Ohio Agricultural Experiment Station in four districts in that State, beginning in 1909. On March 1, 1910, A. R. Ross was employed solely on department funds to carry on such work in Bedford County, Pa. In the meantime, demonstration work in the South expanded rapidly and received wide publicity. As a result the demand for similar work in other sections of the country became insistent.

On March 11, 1911, J. H. Barron was appointed as county agricultural agent for Broome and adjacent counties in New York. The United States Department of Agriculture, the New York State College of Agriculture, the Chamber of Commerce of Binghamton, N. Y., and the Delaware, Lackawanna & Western Railroad Co. cooperated in the employment of this agent. This marked the beginning of county agricultural agent work in cooperation with State and local agencies in the Northern and Western States. The type of cooperative organization used in Broome County was called a farm bureau. The farm bureau as a county extension organization was adopted later by the Office of Farm Management in the promotion of county agricultural agent work in other States.

The Council of Grain Exchanges of the Chicago Board of Trade, about this time, stimulated wide discussion of county agricultural agent work by announcing its offer of \$1,000 to each of 100 counties that should first satisfactorily organize to employ such an agent. During the year, county agricultural agents were employed in Pettis County, Mo., and Kankakee and De Kalb Counties, Ill., on funds supplied through local organizations of business men and farmers, wholly independent of the State agricultural colleges or the United States Department of Agriculture.

The North Dakota Better-Farming Association, promoted primarily by the Great Northern Railway, was also organized in 1911, and during the first year cooperated with 2,346 farmers in 12 counties in North Dakota and Minnesota through a force of 18 agents. At first the association did not cooperate with the State agricultural colleges or the United States Department of Agriculture.

In South Dakota, as a result of agitation by a similar association, three counties were organized for county agricultural agent work, nominally in cooperation with the State agricultural college. The first agent was appointed on March 1, 1912. The State agricultural colleges in Maine and New Hampshire, in cooperation with the general education board, began work in 1912. Thus, in widely separated places and under the auspices of various agencies, the county agricultural agent movement in the Northern and Western States got under way.

Thus far, the Bureau of Plant Industry had not encouraged efforts to extend the farmers' cooperative demonstration work into Northern and Western States. It was considered as emergency work that could be satisfactorily carried on only in cotton-growing States infested or likely to be infested with the boll weevil. Believing that its farm-management and farm-practice activities were better adapted to the needs of the territory outside the Cotton Belt, the bureau had rapidly expanded such work, with the view of providing farmers in the Northern and Western States with assistance such as those in the cotton States were receiving. It was soon evident, however, that, irrespective of Federal aid, supervision, or encouragement, the demand for demonstration work was becoming so great that it would soon be started by some agency or agencies.

Believing that it was desirable to have such work, if started, conducted on some uniform plan by the United States Department of Agriculture in cooperation with the State agricultural colleges, it was decided to ask Congress for the necessary authority and funds to enable the Bureau of Plant Industry actively to promote demonstration work in sections where it was not already organized. In anticipation of favorable action by Congress, the Office of Farm Management began in the spring of 1912 to approach the State agricultural colleges in the Northern and Western States with a plan for cooperation in county agricultural agent and boys' club work. The agricultural appropriation act, approved August 10, 1912, carried the usual item, "to investigate and encourage the adoption of improved methods in farm management and farm practice," to which were added the words, "and for farm demonstration work." An increase in funds of approximately \$161,000 was also included. Thus the authority and funds to prosecute this added line of work were provided for the Northern and Western States.

Under the stimulus of active promotion by the United States Department of Agriculture, as well as other agencies, the spread of county agricultural agent work in the Northern and Western States was very rapid. During the fiscal year ended June 30, 1913, the Bureau of Plant Industry perfected cooperative arrangements with State agricultural colleges in about 20 States, and county agricultural agent work was begun with 113 county agricultural agents cooperatively employed.

ORGANIZATION UNDER THE SMITH-LEVER ACT

When the Smith-Lever Act went into effect on July 1, 1914, county agricultural agent work was already well established in the United States, although fostered by private philanthropy. The act provided for placing the work on the solid basis of public support, for an administrative organization, and for a gradual and systematic development. It created a uniform extension system, based on the cooperation of Federal and State Governments, through which all extension work of both the United States Department of Agriculture and the State agricultural colleges was to be conducted. Written agreements were made between the department and the State agricultural colleges in order to prevent duplication in extension activities and to coordinate properly the extension work. A new bureau, the States Relations Service, was organized in the department, and the Office of Extension

Work South and Office of Extension Work North and West, which previously had been functioning as parts of the Bureau of Plant Industry, were transferred to this bureau. These offices, supervising extension work in different sections of the country, although using somewhat different methods of organization and procedure, had much the same extension philosophy based on the farm demonstration. In the States, supervisory officers called State county agent leaders or State agents, responsible to the State extension director, were appointed in immediate charge of promoting county agricultural agent work and of supervising the county agricultural agents.

PROGRESS DURING FIRST DECADE UNDER SMITH-LEVER ACT

The major effort of county agricultural agents during the first 10 years of the work under the Smith-Lever Act has been along pro-

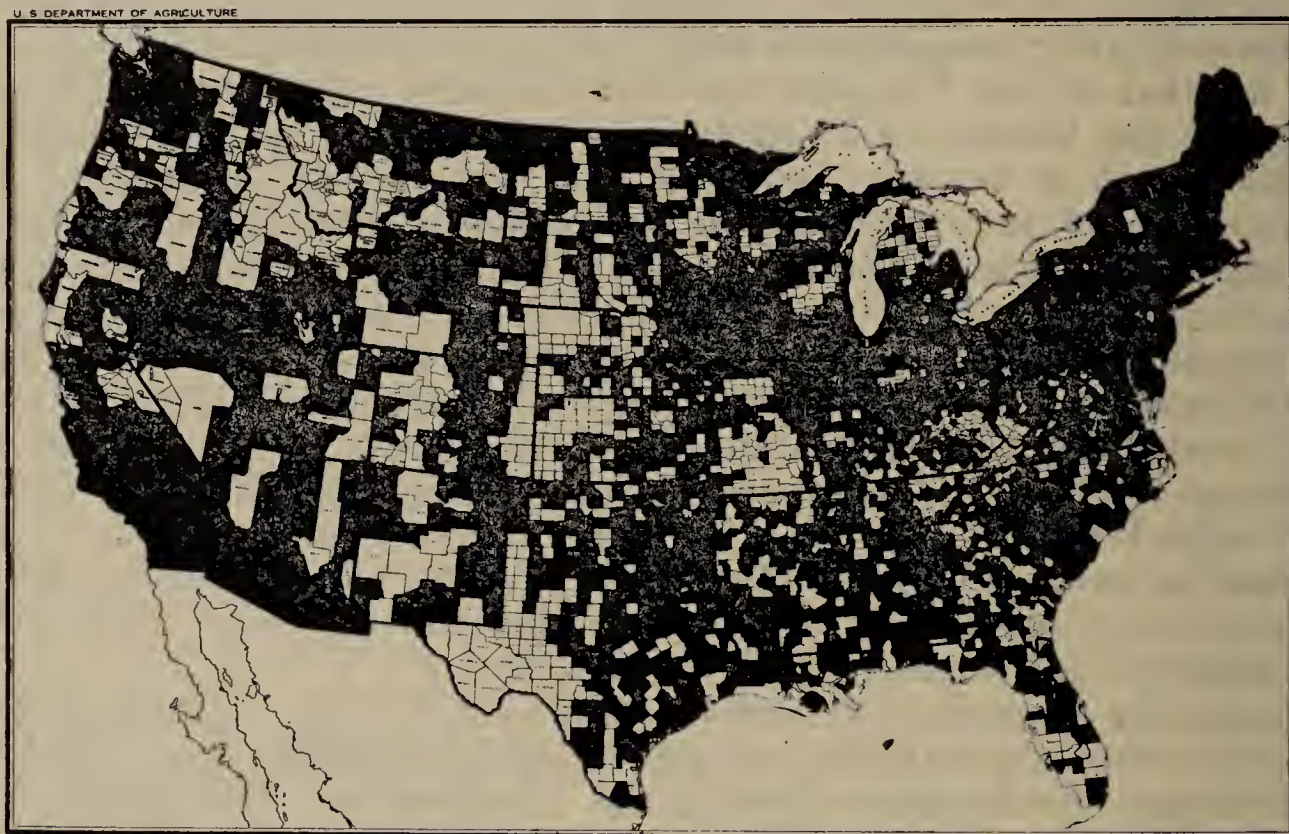


FIG. 24.—Map showing counties (in black) having county agricultural agents, June 30, 1924

ductive lines. The demonstrations conducted by them may not always have reached the fundamental problem of farm organization as their basis, but for this kind of work few guideposts existed. Neither the United States Department of Agriculture nor the State agricultural colleges had any extensive background of information. The science of farm management was only beginning. As the years progressed the importance of the business organization of the farm became more apparent and the demand for work of this character more insistent. (Fig. 24.)

Increasing attention has been given in recent years to the planning of farm enterprises and the preparation of community, State, regional, and national production programs. Progress in this work is dependent on an organized study and interpretation of the great mass of data. Up to the end of the first 10-year period only a beginning has been made in this field, which may easily become the major objective in the second decade of county extension work.

FARMER MOST IMPORTANT FACTOR

In the organization of agriculture for effective county agricultural agent work the farmer himself has been the most important factor throughout the country. Successful farmers or forward-looking men who recognized the importance of the work and who saw its possibilities have been used as demonstrators or cooperators. These men have been grouped in organizations of various kinds. In the Southern States such organizations were often known as agricultural councils; in the Northern and Western States they took a more formal character, in many cases having a paid membership. The fee, however, was only nominal, usually 50 cents to \$1 a year. The organizations were called a variety of names, such as better-farming association, county farm bureau, and county agricultural association. All of the organizations were the result of the effort to bring together friends and supporters of the work so that the county agricultural agent might have their counsel and aid. The organizations have proved most helpful in planning what was to be done and were effective in providing leaders for various phases of work undertaken in the communities and counties.

The need for the active cooperation of farmers has continued. It is believed to be an essential to the largest success in county agricultural agent work. The experience of the past 10 years indicates that the particular form that the organization may take is not important. It may or may not be based on a definite membership; committees may be elected by the membership or appointed by the county agricultural agent; or the organization may be made up of delegates from farm organizations or of persons appointed by some public authority. Under all systems good results have been obtained.

The essential thing seems to be to assemble able and willing people, to give them some training in what they are to do, and to put them to work for the good of their communities in effecting agricultural improvement. This is entirely aside from the farm organization *per se*, either political or economic, which involves a problem of extension work, and responsibility for which rests with the farmers themselves. This difference between farmers' organizations and organizations to promote extension work has at times been obscure but, happily, is now more clearly understood. Farm organizations in varying degrees have lent their aid to extension effort and have properly assumed full responsibility for their own promotion and program. Extension work, as a separate, distinct public agency, cooperates with all farm organizations in their respective programs as they may coincide with the extension work conducted as a public agency.

MAJOR EFFORT ALONG FARM PRODUCTION

The major effort in county agricultural agent work during the 10-year period has been in connection with farm production. The development of the work has necessarily been in relation to the needs of individual farmers and of the farm communities which have been the units in program making. The influence of the work on the trend of agriculture from a State, regional, or national standpoint is less apparent, since agricultural evolution is a slow process at best.

Ten years is a short period, and it is difficult to determine whether the tendency, even of 5 or 10 years' duration, is to be permanent or

not. The degree to which the agricultural development of the period may be due to natural or economic causes or to extension effort is also difficult to determine. Long-time programs have only recently come into use, and only in a small way. Goals have been incidental to the conduct of the work and have been largely goals of effort rather than goals of result. No survey of conditions was made at the beginning of the work. It has been found, however, through surveys of extension results that county agricultural agents have been largely successful in changing farm practices. Literally hundreds of thousands of farmers have been reached by them and have put the improved practices recommended to them into operation on their own farms to their great personal profit and advantage. These thousands of changed practices do not lend themselves readily to summarization or statistical treatment. The aggregate influence



FIG. 25.—County agricultural agent and farmer inspecting cotton-fertilizer demonstration. Hundreds of thousands of farmers have been reached by county agricultural agents during the 10 years and have received great personal profit and advantage from following the improved practices recommended

of the volume of changed practices is more than a matter of definite statistical statement. Certain results stand out that in consideration of the extension programs that have been developed and the extension effort that has been put forth can be reasonably attributed, in a large degree, to the work of county agricultural agents.

In crop production, the cotton industry has been saved and the recommended system of growing cotton under boll-weevil conditions has been accepted by a large majority of Southern farmers. The county agricultural agent movement, it is believed, may claim a large share in this accomplishment. (Fig. 25.) Supplemental to improved cotton production has been the general introduction of leguminous crops, such as cowpeas, soy beans, and lespedeza, over a wide area. In all States adapted to their production the growing of soy beans, sweet clover, and alfalfa has become widespread. Corn, the great cereal crop of America, has been introduced successfully

into the high altitudes of the West and in regions of sparse rainfall where corn production was unknown and thought to be impossible. The control of plant diseases and insect pests in orchard, garden, and field has become a common farm practice. The intelligent use of commercial fertilizers, farm manures, and lime has tended greatly to conserve and improve the fertility of the soil. Demonstrations in the improved breeding, feeding, and management of livestock have affected to a marked degree the type of cattle, sheep, and hogs grown over wide areas. Poultry production has been raised from a farm by-product to an important place as a farm enterprise.

In the work of county agricultural agents, hundreds of thousands of demonstrations have been conducted. Meetings have been held at these demonstrations, and trips and tours of farmers have been conducted to observe the improved practices. Judicious publicity has spread the lesson of the demonstration. The work of the county agricultural agents is on the farms of America, their encomium in the hearts of American farmers. Perhaps their greatest work has been in giving farmers a new tool, their own governmental agencies, the State experiment station and the United States Department of Agriculture, and teaching the use of this tool of organized information.

HOME DEMONSTRATION WORK

The development of extension work with women in the various parts of the country for the past quarter century has been inspired by different needs and brought to pass through varying conditions. In States where home-economics departments were early established in the land-grant colleges, efforts were made to reach farm home makers by state-wide contacts through resident teachers and specialists in home economics, who were the pioneers in this field. To the South belongs the honor of establishing the work on a county basis. Following the advent of county agricultural agent work in the South, Ella G. Agnew was appointed in Virginia on June 3, 1910, as the first county home demonstration agent in the United States. In August of that year Marie Cromer was appointed in South Carolina. The work grew rapidly and in 1914, when the Smith-Lever Act was passed, 349 county home demonstration agents were employed, some of whom were part-time workers.

In the Northern and Western States, where the work had not as yet been established on the county basis, state-wide specialists rendered service to farm women through the medium of farmers' institutes, extension schools, reading courses, and the lecture demonstration. These influences prepared the minds of the people for the more intensive type of service to be rendered by home demonstration agents in many counties. The first agent employed on State funds in the Northern and Western States was Katherine Mills, who began her work in Erie County, N. Y., in August, 1914.

It was recognized by administrative officers from the beginning that only women of character, good judgment, and personality could initiate and develop home demonstration work in harmony with the wishes and best interests of home makers. Owing to careful selection, the majority of home demonstration agents have met these requirements. No more capable group of workers can be found in any educational field than the group engaged in home demonstration work. Their quick adaptation to methods to meet the requirements

of the field, their success in winning the confidence of farm women, their genuine interest in the social and civic life of the communities are unusual and may be attributed to the challenge of the work itself. The fine character and ability of the majority of these workers has called forth not only the most unselfish service but a marked degree of ingenuity and resourcefulness.

The early days of home demonstration work furnish an interesting chapter in the history of home-making education. In those days Federal funds were not available and the work was dependent for its support on a national foundation, commercial and civic organizations, and public-spirited individuals.

The first bills proposed to Congress for extension work referred only to agriculture. Shortly before the passage of the Smith-Lever Act provision for home economics was included in the bill. In referring to this feature, A. F. Lever, chairman of the Committee on Agriculture of the House of Representatives, said:

This is the first time in the history of the country that the Federal Government has shown any tangible purpose or desire to help the farm woman in a direct way to solve her manifold problems and lessen her heavy burdens. The drudgery and toil of the farm wife have not been appreciated by those upon whom the duty of legislation devolves, nor has the proper weight been given to her influence upon rural life. This bill provides the authority and funds for inaugurating a system of teaching the farm wife and farm girls the elementary principles of home making and home management, and your committee believes there is no more important work in the country than this.

In distributing funds among the various projects for some time after the passage of the Smith-Lever Act, agricultural work took precedence and the introduction of home demonstration work was delayed in many cases until the agricultural agents had become established. This was particularly true in States where home demonstration work had not been started until after the new legislation went into effect. In certain Southern States the character of the work, which was placed on an economic basis from the start, the influence of the workers, and the fact that the work was somewhat established in the field, resulted in home demonstration in the South taking its place on equal terms with agriculture when the first allotment of funds was made. The total funds from all sources expended in the States for home demonstration work for 1923-24 was \$2,831,269.37.

HOME DEMONSTRATION AGENTS IN COUNTIES

Beginning with four counties with home demonstration agents in 1910, the number increased steadily until the climax was reached during the World War, when 1,715 counties employed home demonstration agents. The majority of these women were employed cooperatively by the State agricultural colleges and the United States Department of Agriculture with funds made available by the war emergency act. This act provided for national security and defense through stimulating agriculture and facilitating the distribution and conservation of agricultural products. The part played by these agents during the war was important, since they were in many cases the only paid trained workers in home activities cooperating with Federal and other agencies assisting housewives in their part in the war program. At the close of the war, when emergency funds were discontinued, the number of appointments was reduced to those

counties where the work had become organized and established and where it was partly financed by local funds, and reached the postwar ebb of 699 counties with women workers in 1921. Since that time there has been a steady rise until in 1924, when 930 counties had home demonstration agents. (Fig. 26.) These women are well trained, and their work has become a stable and permanent factor in the organized life of the counties where they are working in direct response to local demand.

War activities gave limited impetus to permanent development. Organization was planned and adapted for cooperation of the various war agencies, which later disbanded. The credit, however, for holding the work together is owing to the leadership, stability, and high standards of those who directed it and their untiring efforts through the long process of adjustment from the signing of the Armistice to the present time.

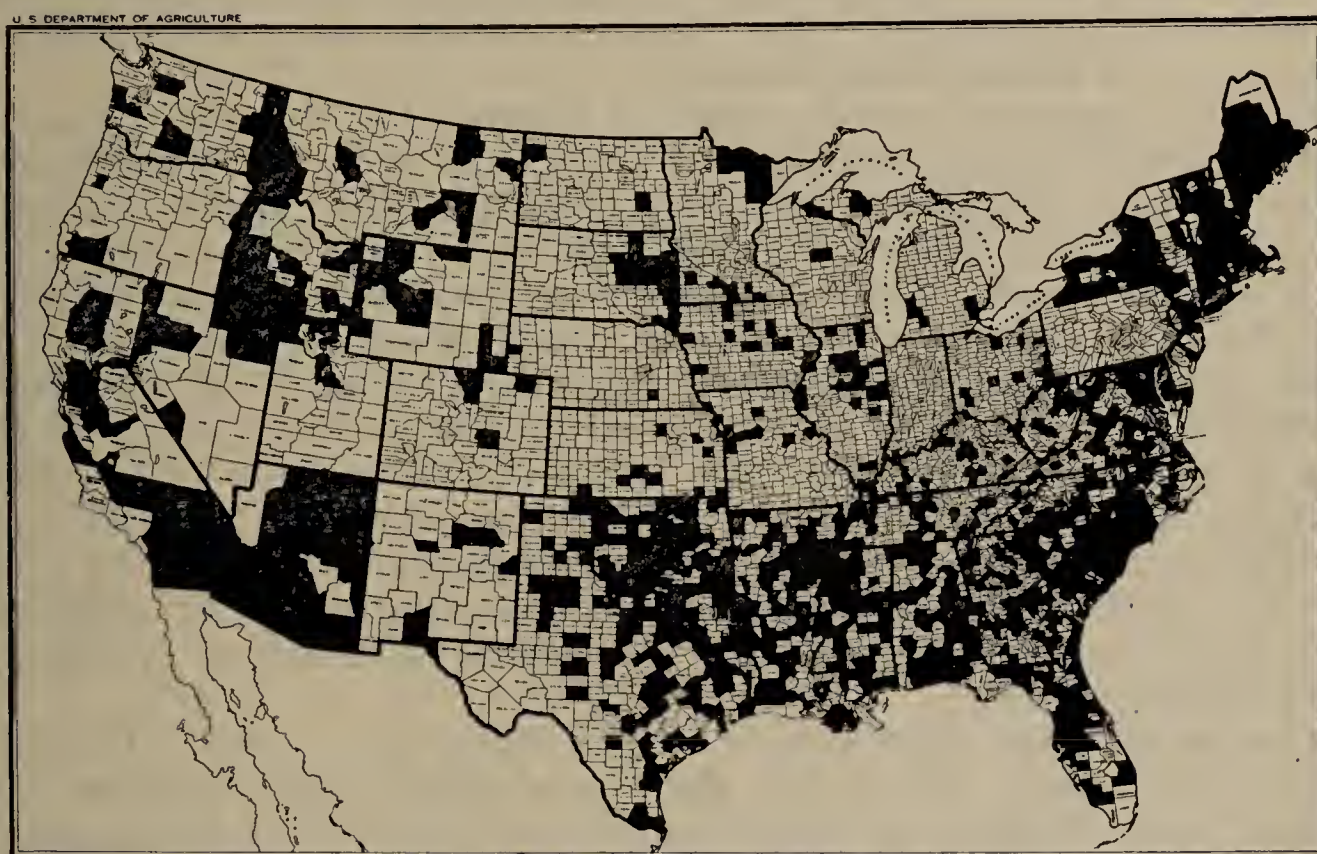


FIG. 26.—Map showing counties (in black) having home demonstration agents, June 30, 1924

HOME-ECONOMICS SPECIALISTS

A review of home demonstration work would not be complete without reference to the part which specialists in home economics have had in shaping state-wide programs based upon needs and problems peculiar to their projects and in acting as counselors and cooperators with home demonstration agents and farm women in counties in carrying on the work. These subject-matter leaders have been a great source of strength to the home demonstration agents through making available the subject matter most needed and best adapted for immediate application in farm homes. There is no doubt but that the work is stronger in those States where it has been possible to employ specialists for the major lines of home economics. The county home demonstration agents in these States have been enabled to go forward with their program with steadiness and sense of security not possible without such assistance.

Agricultural agents have given material assistance in home-economics projects. New York is typical of many States where the work

is correlated among specialists in fields related to home economics. In New York, the vegetable-garden specialist, the dairy specialist, and the nutrition specialist cooperate on a program of a better diet. The coordination of specialists' activities has been attempted in every State, and has brought agents and specialists working on related lines closer together.

URBAN HOME DEMONSTRATIONS

As home demonstration work developed among rural women, it was natural that city women, also, should desire similar service for themselves. Since it did not prove feasible after the Smith-Lever Act was passed to extend the application of the act to the cities, city home makers on their own initiative have endeavored to finance the work through the cooperation of various city organizations and have enlisted the assistance of the State agricultural colleges in organizing and supervising it. As early as 1916, a number of cities carried on activities patterned somewhat after home demonstration work among farm women.

The food production act, passed in August, 1917, made available Federal funds for city work during the war period. In consequence, cities already organized promptly obtained this added financial support needed to carry on war work, and many agents were appointed as a war measure. Their salaries were paid by the Government and the local expense was borne by the various organizations. In some cities existing organizations were used to carry on the work. In others, new ones were created to insure greater efficiency. At the end of the fiscal year 1918, 209 home demonstration agents were working in cities in 35 States. When the emergency funds were discontinued a number of the cities found means of continuing these agents. In 1921, seven States were cooperating with city organizations and the State agricultural colleges in maintaining city home demonstration work.

The permanent organization of the work has varied. In some cases, the agent cooperates with established organizations. In others, home bureaus or home centers are established which act as clearing houses for all the activities of the home demonstration agent who, with officers and committees, guides an independent type of service to city home makers.

Support comes through the city chest, through subscriptions from city organizations, and through direct appropriation from public sources. Membership fees in some cases have assisted and chambers of commerce, boards of trade, and churches have contributed. Agricultural colleges in States with large populations are fostering and encouraging city home demonstration work and in some instances are making appropriations for its support. It is believed that urban home demonstration work has come to stay as an important means of extending home-economics training to city home makers.

EXTENSION WORK OF VALUE TO NEGRO HOME MAKERS

Extension work has proved of signal value to the negro home makers of the South, where through imitation of good practices large numbers of farm homes have been made sanitary and comfortable and children have been better nourished and cared for through wiser use of limited resources within the reach of negro families. Negro

home demonstration agents were introduced in the South in 1912, first in Virginia and Oklahoma and later in Arkansas, Georgia, North Carolina, and other Southern States. In 1919, at the height of the emergency, 268 of these agents were at work. During 1924, 114 devoted full time to negro farm homes. The handicap of the limited number of negro women trained for extension work is being overcome by the efforts of Tuskegee and Hampton Institutes, and similar institutions, where promising young negro women students are being trained to act as home demonstration agents.

During 10 years or more that extension work with negro women has been under way, it has demonstrated its peculiar value as a teaching method for the race. It has developed contentment in thousands of negro homes and a willingness on the part of women to remain home makers in the country rather than to leave the plantation for the wage of the city. Thus extension work has aided in the labor problem of the South.

STUDIES OF FARM HOME BRING OUT IMPORTANT FACTS

As home demonstration work has become more completely organized, workers and home makers were forced to recognize the importance of concentrating attention upon a few activities important to the welfare of the majority of homes. In doing this, the need arose for more thorough and complete information regarding actual farm-home conditions upon which to base a long-time program. With this in mind, the department in cooperation with State agricultural colleges in Northern and Western States, in 1919 conducted a survey of 10,000 representative farm homes. The 10,000 records, which were obtained largely by home demonstration agents, presented convincing facts as to living and working conditions in farm homes.

Typical of the information obtained through the survey⁶ are the following items: The average working day, summer and winter, for 10,000 farm women was 11.3 hours; 87 per cent of the farm women reported no regular vacation during the year; 61 per cent carried water for household uses a distance of 39 feet; 96 per cent did their own washing; 92 per cent did all or part of their own sewing; 32 per cent had running water in the home; 85 per cent had outdoor toilets; 20 per cent had bathtubs in the home. These percentages are based on the number of replies received, which ranged from 6,500 in the case of water carried to 9,800 in the case of doing the washing.

Interpreted by extension workers, the survey has been a means of pointing out real problems and their solution, and has resulted in organized and sustained effort in certain home phases of the extension program. The data obtained have started farm men and women to thinking along new lines and have also stimulated the introduction or rearrangement of labor-saving equipment, rearrangement of kitchens, installation of water systems, and miscellaneous improvements in the surroundings of many farm homes.

MAJOR HOME PROBLEMS AIDED

Home demonstration work during the 10-year period has touched on practically every phase of farm home activity and interest of the

⁶ See U. S. Dept. Agr. Circ. 148, The farm women's problems.

farm woman. The many problems connected with (1) the feeding, clothing, and general care of the farm family, (2) the equipment and beautification of the home, (3) ways of adding to the farm income, and (4) the improvement of social and recreational opportunities of the community that have confronted farm women have afforded home demonstration agents unlimited opportunities for rendering aid in their solution. (Fig. 27.)

NUTRITION

Work in nutrition has been a part of the extension program of every State and has involved the largest investment of extension funds of any home-economics project. Work dealing with main-



FIG. 27.—Farm woman in her kitchen which has been arranged to plans furnished by the home demonstration agent. Practically every phase of farm-home activity has been included in the work of the home demonstration agent during the 10-year period. Such activities have included the feeding, clothing, and general care of the farm family, the equipment and beautification of the farm home, methods of adding to the farm income, and the improvement of social and recreational opportunities of the community

tenance of normal weight, corrective diets, food required for the growing child, food for the expectant mother, meal planning, canning, storage, the food budget, and the garden budget have been among the many phases of the nutrition project.

One of the newest and most outstanding phases of the work is the emphasis of the importance of home production of food for the farm family, centering interest upon the garden, the dairy cow, the poultry flock, and various forms of food preservation as a means of insuring a well-balanced diet at all seasons. The South early recognized the importance of this phase of the work and emphasized the necessity of an adequate food supply with a variety of vegetables and fruits, with milk and eggs, and other farm products for the family table, and canning, preserving, storing, and brining have been extensively taught and practiced.

Child feeding, installing equipment for school lunches, milk campaigns in many cities and rural communities, and garden campaigns have been important activities under the nutrition project. The food calendar, as worked out by Illinois in 1919, has since been used in many States and proved a practical means of assisting the farm home maker in the selection and preparation of foods to meet the special requirements of children and adults, and also to check the tendency toward excessive eating. One noticeable change in nutrition activities through the years is the growing interest and participation of all members of the family in the nutrition work. Positive health work as it is related to nutrition activities has been included in practically every State nutrition program.

MILK CAMPAIGNS

"Milk-for-health" campaigns conducted by the Bureau of Dairying in cooperation with the States have been a striking and effective means of promoting proper nutrition. This type of campaign which grew out of the cottage-cheese work conducted during the war illustrates the effectiveness of good organization in extension work. The work started with the employment of 40 women to promote the use of skim milk for human consumption in the form of cottage cheese. The interest evidenced by the people and the success of the work prompted the Dairy Division of the Bureau of Animal Industry to undertake a long-time program on "Milk for health," with the dual motive of contributing to the health of the people and, by increasing the demands for milk, advancing the dairy industry. Plans worked out for county and community programs have been applied effectively in both urban and rural communities, always with the assistance and cooperation of home demonstration agents and other members of the extension division of the State college within the State where the work has been conducted.

CLOTHING

The clothing project has helped to meet in a practical way the very real and difficult problems of the farm home in properly clothing women and children. Some of the effective phases of clothing work have been: The relation of clothing to health and economy, selection, construction and remodeling, and line, color, and design as factors in durability, suitability, and becomingness of dress. The clothing work has been adapted to the particular needs of the various sections in which it has been carried on. The nearness to good shopping centers, the funds available for the purchase of clothing, the size of the family and age of the children have been factors in determining the advice and instruction given by extension workers. The making of simple and durable children's garments of a kind easily put on and taken off has been developed to a considerable degree as a phase of clothing work in recent years. Millinery instruction given by extension workers has been a service of economy and satisfaction to thousands of farm women and has proved itself to be a highly appealing activity.

HOME MANAGEMENT

The home-management project has grown from year to year and is increasingly used as a means of correlating all home activities that deal with labor and materials used by the farm women, considering

such factors as the effect of food upon growing children and grown-ups, the effect of sanitation upon health, the influence of a comfortable home and environment upon the young people, the effect of amusement and simple hospitality upon the life of the home, and the effect of the right use of leisure upon the spiritual and intellectual advance of the family.

Through this project the farm woman has been encouraged to analyze her housekeeping problems and thus arrange to best advantage the sequence of daily and weekly household tasks; to develop a joint sense of responsibility and cooperation by all members of the family, and thus make a fair distribution of the labor of the home; to weigh relative values and prepare budgets in the expenditure of time and money in order to produce a proper balance.

LANDSCAPE GARDENING

Home demonstration work has aided materially in improving the physical appearance of the farm home and its surroundings. Many thousands of farm homes in the 10-year period have been made inviting and attractive by plants and shrubs well placed and cared for.

The growing of flowers both for home decoration and for marketing, particularly by girl club members, has been an interesting and profitable enterprise. In 1921, Texas, desiring to provide remunerative occupation for those club girls who do not have large garden space for the growing of vegetables for canning, encouraged the production and sale of flowers. This has proved a popular activity in Texas. South Carolina has carried out a similar plan, giving 5 per cent extra club credit to a girl in any club if she grows flowers successfully and makes suitable reports recording her methods and achievements.

CIVIC LIFE OF THE COMMUNITY

The story of how home demonstration agents have influenced the civic and social life of hundreds of communities is an interesting one. Not only have entire families been aroused and interested in matters pertaining to the success of the home, but communities have joined together in many successful enterprises which can be directly traced to the inspiration and good judgment of the home demonstration agent. From every State come reports of aroused interest in community responsibility. Civic beauty, social life and recreation, with the dealing with common problems of the community along many lines, have resulted from home demonstration work.

Home demonstration work in the 10-year period can be justly credited with the wide adoption in American farm homes of improved practices in feeding and clothing the farm family, household management, maintenance of family health, and the improvement and beautification of the home and its surroundings. Farm women whom this extension influence has reached have been enabled to set up and maintain a higher standard of living for their families. They have acquired greater pride in their homes and their household duties. They have increased their personal incomes through the intelligent standardization and marketing of surplus home products. They have learned to use the funds which they have for family expenditures more wisely and in terms of a more comfortable and attractive home life. They and their children are more simply and attractively dressed. Their family diet is more wisely and economi-

cally selected. Home conveniences, such as improved water supply, improved sanitation, better means of heating and lighting the house, have aided many farm women in doing away with much of the drudgery and monotony of farm life and have given them more time for recreation and for companionship with their children and neighbors.

Participation in extension activities has helped the farm woman to find a more active and important part in community life and improvement. Through extension influences she has learned to study and solve with other women of her locality the problems of the community of especial interest to them. Through constructive local leadership developed among the farm women, through their learning to plan and act together in local affairs, through the influence it has exerted in making the life of the farm and of the country community attractive and desirable, home demonstration work beyond question has made a substantial contribution to American national life.

BOYS' AND GIRLS' 4-H CLUB WORK ⁷

OBJECTS OF WORK WITH YOUNG PEOPLE

Boys' and girls' 4-H club work may be defined as a system of instruction in agriculture and home economics given to rural boys and girls by the United States Department of Agriculture, the State agricultural colleges, and local forces cooperating, by means of farm, home, and community demonstrations, and club activities. It has for its purpose the improvement of rural practices and the teaching of rural boys and girls how to make of themselves efficient, public-spirited, useful citizens.

The objects of club work are:

(1) To demonstrate better agriculture and home practices in rural communities through the agency of boys and girls.

(2) To develop future rural leaders.

(3) To teach rural boys and girls how to counsel together, work together, cooperate, achieve, so that they may function more fully in adult life.

(4) To bring boys and girls in contact with the cooperative extension system, so that when they later operate farms or have farm homes, they will know and support the sources of agricultural and home-economics information.

(5) To bring rural young men and women in contact with the best practices and finer things in agriculture for the purpose of developing an appreciative attitude toward farm work and country life, faith in the industry, pride of occupation, and vision of the possibilities of rural life.

(6) To teach rural boys and girls through having them do something on the farm or in the home or community that is worth while, and thus bring them in contact with live problems and with inspiring men and women who may encourage them to finish school, go to college, or otherwise better fit themselves for life's work.

CLUB ENROLLMENT INCREASED DURING 1924

In 1924, 510,355 boys and girls were enrolled in club work, of which 283,283 completed projects undertaken and submitted written reports of the results obtained. In 1923 the enrollment was 459,074, of which 249,416 completed all club requirements. This is an increase in

⁷ The term 4-H signifies the four things which must be trained by the boy and girl to insure success in club undertakings—head, heart, health, and hands. The mind, or head, of the boy and girl must be trained to think, plan, and reason, and the heart to be kind and sympathetic toward the work and toward associates, so that all might work together; the health must be improved and kept good for efficiency and enjoyment; and the hands must be trained to be skillful. The symbol of the 4-H club is the four-leaf clover containing an H on each leaflet, the clover signifying the purpose for which the first clubs were created—soil conservation.

1924 of 51,281 in enrollments and 33,867 in the number completing the project. During the year 1923 the 459,074 boys and girls were enrolled in 722,508 projects, of which 428,746 were completed. In 1924 the 510,355 boys and girls enrolled in 945,663 projects, of which 489,262 were completed. The project enrollment in 1924 was exceeded only once in the previous nine years, and that was in the war year, 1918, when the project enrollment was 1,018,870.

Of the total club enrollment in 1924, more than 58 per cent comprised girls, and of the 300,545 girls enrolled in the various club projects, 173,545 enrolled in some phase of clothing construction. A total of 100,702 girls reported the making of 321,995 garments and similar articles; 83,149 girls were enrolled in food-preservation clubs; 43,971 girls reported the canning, preserving, and pickling of 2,562,641 quarts of fruit, vegetables, and meat; and 102,186 girls were enrolled in clubs emphasizing the preparation and serving of wholesome, well-cooked food to the farm family.

Although the primary interest of the future home makers was concerned with clothing, food preservation, food preparation, and home management, the economic side of farm life was not neglected by them. There were 51,921 girls enrolled in poultry clubs and 7,224 in dairy clubs. In order to make the home more attractive and the surroundings more satisfying, 33,667 girls were enrolled in the beautification of home grounds project. The home garden, from which a bountiful supply of wholesome food is obtained for the farm family, attracted 66,499 girls.

The demonstration projects that interested the boys were only limited by the problems of the farm itself. There were 38,541 boys enrolled in poultry clubs, 34,448 in swine clubs, and 14,973 raised a dairy calf or purebred heifer. In the South, where cotton is one of the main sources of income, 16,504 boys were enrolled in cotton demonstration clubs, and 9,829 club members reported that 11,042,698 pounds of seed cotton were produced in the demonstrations.

LOCAL LEADERS ASSIST CLUB AGENTS

Of the 3,419 county extension agents reporting on extension work for the year, 2,753 had 4-H clubs organized in the counties to assist them in carrying on demonstration work. The local leaders numbered 37,905. These voluntary local leaders, who were adult men and women, assisted in the enrollment, helped club members obtain material for demonstrations, met with the clubs to study the instruction for conducting the demonstrations, assisted the club members in training the demonstration teams, directed the club tours, accompanied the boys and girls to camps and short courses, assisted club members to make out their reports, and gave the inspiration and guidance that are necessary to make a successful 4-H club.

VALUE IS EDUCATIONAL RATHER THAN ECONOMIC

The actual production by boys' and girls' club members is chiefly important as an index of the diligence and care exercised by them in using the better practices in agriculture and home economics. The quantity produced is, in fact, a by-product which has a sufficient money value to pay the entire cost of the production and supervision and, in addition, leave a liberal margin to the club member for his labor. The worth-while values of the club work are more in its

educational than in its direct financial results. It encourages intelligent effort. It points to the better way of doing things. It adds zest, inspiration, and enthusiasm to every task about the farm and in the home. It teaches cooperation and develops leadership and community responsibility.

CLUB WORK ORGANIZED TO IMPROVE FARM AND HOME LIFE

Boys' and girls' club work is a part of the general extension program, organized for the purpose of assisting the farmers and their families to bring about immediate improvement of farm and home life. It is part of the unified effort of men, women, boys, and girls to solve this common problem. The State director of extension and the State supervisors of the several lines of extension work under him train the county extension agents in the proper methods of conducting the work and coordinating it with the extension program in the county. The specialists, working out from the State agricultural college, prepare the subject matter, train local leaders, outline demonstrations for the demonstration teams, and judge club exhibits at fairs and exhibitions. The county agricultural agents, the home demonstration agents, or the county club agents obtain the local leaders, conduct the training schools, organize the club tours, direct the exhibits at county and State fairs, and act as general advisers and directors of the club organization in the county. The State club leaders and their assistants are the coordinating force of the extension service for all those who deal with young people in an extension program. The genuine interest of all extension people in boys' and girls' club work made possible the good results obtained in 1924. Approximately \$1,000,000 has been expended by the administrators of the cooperative extension act on boys' and girls' club work for each of the past five years, which is indicative of the wide interest and confidence shown in the farm boy and girl.

PUBLIC COOPERATION HELPFUL

Farm organizations have been a powerful factor in promoting demonstration work carried on through boys' and girls' clubs. The American Farm Bureau Federation has made boys' and girls' club work a part of the regular program in the county. The National Grange employs a secretary, who devotes full time to work with young people. The officers of these national associations have brought this work forcibly to the attention of local organizations, through which local club leadership has been obtained. The National Committee on Boys' and Girls' Club Work, composed of business men and farmers, has done much in augmenting the 4-H club movement through coordinating the efforts put forth by all interests outside of the extension service.

County fairs, State fairs, interstate fairs, and expositions have reorganized their premium lists so that the exhibits, demonstrations, and judging contests of the 4-H clubs are permitted to have a leading part in the program. Many county fairs and a large number of State fairs have been conducting camps for club boys and girls at the time of the fair. Young people are quartered on the fairgrounds during the entire week. The boys and girls look after their exhibits and conduct demonstrations from time to time during the week. Regularly organized judging contests among club members are also con-

ducted. The interstate fairs at Springfield, Mass., and Sioux City, Iowa, have provided camp equipment for club boys and girls from several States. Separate sections have been provided for club exhibits and properly equipped booths and halls for the demonstrations. The International Livestock Exposition, the National Dairy Show, the Junior Livestock Show, the Pacific International Exposition, and other interstate and national expositions have cooperated in furthering extension work with junior farm people. State and county leaders have found such expositions a satisfactory place for conducting conferences on boys' and girls' club work.

Breed associations have recognized the club movement as a worthwhile factor in the introduction of purebred stock on farms. Two of the dairy-breed associations have employed men who devote full time to cooperation with extension agents. Representatives of these associations have prepared circulars, located purebred stock, assisted county and State breed associations in locating leadership for dairy clubs, and, in addition, have provided prizes to be offered at State and interstate fairs. Commercial clubs have worked with county extension agents in providing funds to be lent to boys and girls to purchase animals and equipment for demonstrations and prizes for outstanding work.

Luncheon clubs, such as the Kiwanis, the Rotary Club, and the Lions Club, have cooperated by providing summer camps for club members. They have entertained the young people on achievement day and have provided automobiles for club tours. The larger business organizations, such as the National Bankers' Association and the railroad companies, have made boys' and girls' club work one of the projects to be encouraged and assisted. Railroad companies have worked with boys and girls, through the extension agents, by providing trips to short courses and, in some cases, have given very material aid to club members by bringing in and distributing purebred seed, hatching eggs, and poultry.

The local banker has been a large factor in the development of club work. His intimate knowledge of economic conditions in the territory surrounding his bank has enabled him to see clearly the needs of the community. Every year local banks have set aside large sums of money to be lent to club members to purchase livestock, poultry, and certified seed. They have found that young people engaged in club work, although immature, are capable of assuming an obligation and paying it when due. Local bankers have also acted as local leaders for clubs. In several States, the State bankers' association has provided the State boys' and girls' club leader with sufficient funds to purchase 4-H emblems for each boy and girl in the State completing a club project.

Several of the leading farm papers have devoted entire issues to the boys' and girls' 4-H club movement, and some of the larger papers have offered prize trips to short courses at State agricultural colleges. Daily newspapers and the larger metropolitan publications have featured 4-H clubs in news columns and editorials. The earnestness with which the 4-H club member carries through a demonstration of the better practices in agriculture and home economics has attracted the attention of citizens in all walks of life. There has been no lack of support.

EARLY DEVELOPMENT

Between 1890 and 1900 there developed among the people of the United States a demand for the introduction into the rural schools of subjects that would stimulate an appreciation of rural life and its opportunities, instead of confining the teaching to studies that ignored the country and directed the pupils' attention to occupations of the town and city. In line with this trend of thought, farmers' institutes early recognized the need of a more satisfactory method of appealing to farm boys and girls. A plan was developed for assisting boys and girls to conduct on their farms demonstrations which were thought of in the light of contests. These contests were known as production contests, net-profit contests, or exhibit contests. In many cases the county superintendent of schools acted as an organizer of the young people and farmers' institutes cooperated by supplying high-quality seed. The county-fair association looked upon this phase of education as something that was novel and interesting and cooperated by offering prizes of various kinds to boys and girls who exhibited articles produced by them. Under the guidance of parents and interested community leaders the work carried on by the young people became more practical. The size of the projects increased and the young people began to keep accurate records of the methods followed and the results obtained.

THE MODERN CLUB IDEA APPEARS

In an attempt to revive interest in a farmers' institute in Macoupin County, Ill., in 1899, Will B. Otwell brought forcibly to the attention of the people the opportunity for interesting the youth in farm and home improvement. After two vain attempts to obtain a crowd, he offered to supply 1 ounce of high-grade seed corn to every boy or girl in the county who would promise to plant the seed and make an exhibit at the farmers' institute. The small packages of corn were distributed to 500 boys and girls. When the institute was opened in the courthouse, 500 farmers attended and nearly as many boys and girls were waiting to place their exhibits. The problem of the local institute was solved, but few recognized the beginning of a new movement that was destined to spread to the entire country and become one of the most potent factors in the improvement of the farm and home. The fame of Mr. Otwell and his corn contest spread. He was made director of the Illinois exhibit at the Louisiana Purchase Exposition. He was determined that boy corn growers of Illinois should make the exhibit. When the exposition opened, the Illinois agricultural exhibit consisted of a pyramid of corn, made with 10-ear exhibits of 1,000 boys. During the five years following the exposition, junior corn contests were begun in Texas, Iowa, Ohio, and Minnesota.

CLUB WORK SPREADS RAPIDLY

It was a mere suggestion of what the club work is to-day, but it marked the beginning of the new system of education, in which boys and girls, under the direction of the United States Department of Agriculture, State agricultural colleges, county extension agents, and parents undertook on their farms to demonstrate one or more improved practices. It developed vision, put joy and happiness into the routine farm toil, and opened a new approach to the better things in country life.

Demonstration work with young people, under the direction of the United States Department of Agriculture, was carried on in Southern States as early as 1906. Systematic organization of boys and girls on a county basis for the demonstration of improved practices under department supervision was first undertaken in Holmes County, Miss., in 1907, and by 1910 the work had extended to practically all Southern States. Work in gardening, cooking, and clothing was organized with girls in some of the North Central States by local agencies and school superintendents during the period 1905 to 1910. The first organized extension work with girls under the supervision of the United States Department of Agriculture was started in Virginia and South Carolina in 1910.

The General Education Board, by financial contributions, gave material assistance to the department in extending the work with boys and girls during the period prior to the passage of the Smith-Lever Act. The State agricultural colleges added extension divisions during the years 1906 to 1914, which directed demonstration work with farm boys and girls.

Contests in club activities were largely featured in club work prior to the passage of the Smith-Lever Act. Educational trips to Washington, D. C., and to State agricultural colleges were regarded as most satisfactory awards for young farmers and home makers in demonstration work in this period. The short course for boys and girls in demonstration work was developed previous to 1914 and proved a valuable aid in the improvement of the demonstrations conducted by young people.

With the exception of one or two States, the responsibility for the organization and direction of the boys' and girls' club movement was taken over by the extension divisions of the State agricultural colleges cooperating with the United States Department of Agriculture when the Smith-Lever Act became effective in 1914.

SCOPE OF CLUB WORK EXPANDS

The expansion of the county extension system under the Smith-Lever Act and the employment of State supervisors of club work under the State directors of extension made available competent leadership that brought about a marked improvement in the organization and conduct of club work. The definite organization of boys and girls into local clubs soon followed, supplemented by the almost universal use of local leaders to foster and guide the clubs organized. The employment of agricultural and home-economics specialists with headquarters at the State agricultural colleges made it possible to publish printed and mimeographed circulars applicable to local conditions and to give definite instruction to club members for carrying on demonstrations.

With the development of community extension programs, the number and variety of projects in which the young people participated increased, there being added to the earlier club projects such lines of work as baby-beef production, potato production, market gardening, clothing, meal preparation, hot school-lunch preparation, lamb feeding, and legume production.

The period from 1914 to 1917 gave the club movement the demonstration team in addition to news items and the exhibit as means of

showing the people of the community the practices used by club members and the results obtained. Procedure in club organization was standardized and such features were established as separate club sections at county, State, and interstate fairs, judging contests, pageants, club camps, and club songs and yells. The employment of county club agents, devoting full time to boys and girls was given a trial in a few counties. Through such agents, it was demonstrated that it was possible to enroll and effectively guide from 300 to 500 boys and girls in a single county.

WAR CONTRIBUTION

During the rapid expansion of the extension system in the war period, more than a million boys and girls enrolled for service in 4-H clubs. They produced food for the family, canned the surplus, collected shells for gas masks, fed an extra beef or a few pigs, and

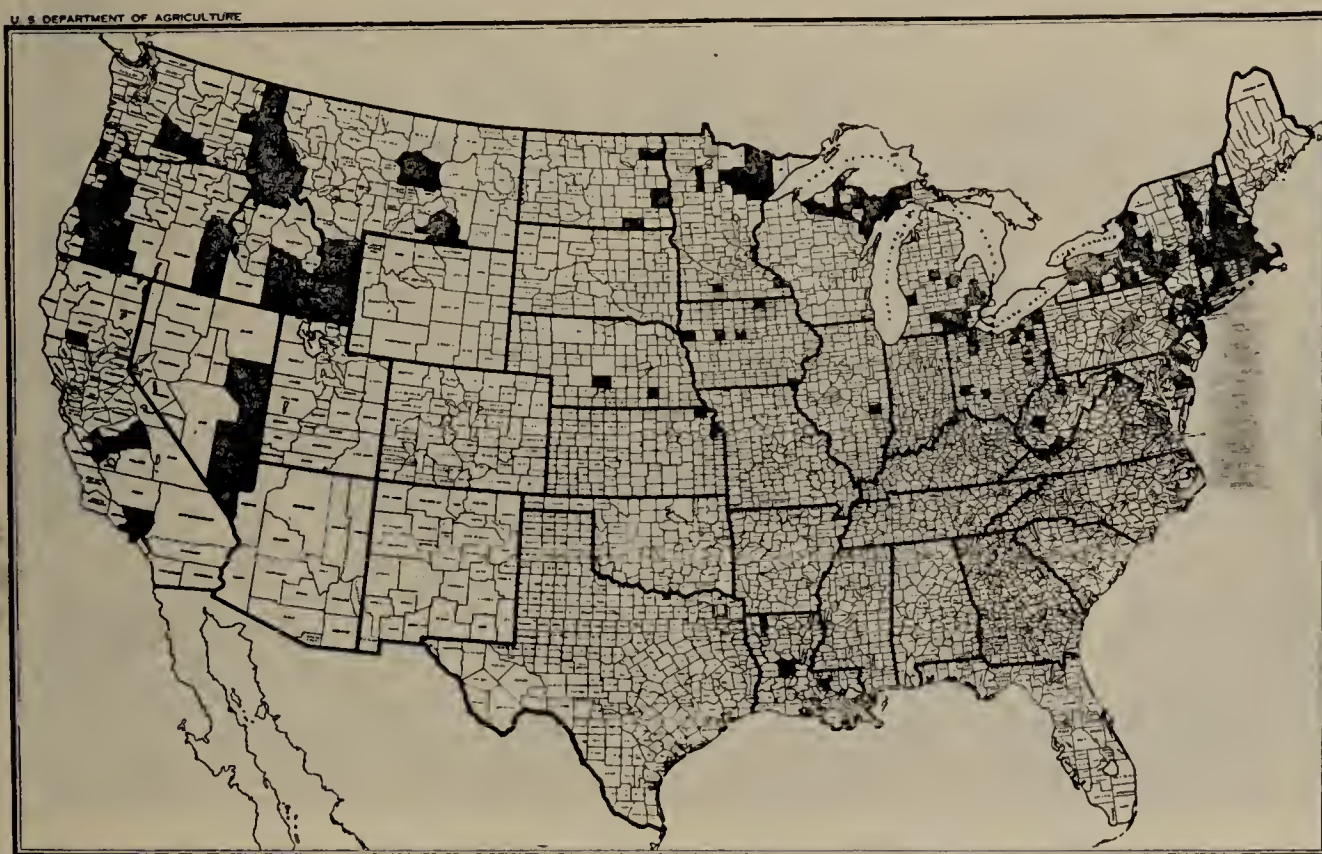


FIG. 28.—Map showing counties (in black) having boys' and girls' club agents, June 30, 1924

took the place on the farms of the older brothers at the front. Club work can be credited with aiding the farm boys and girls of America in making a substantial contribution to the war needs of the Nation.

ADJUSTMENT TO PEACE CONDITIONS

The readjustment of the club program to peace-time conditions and the return to normal growth and systematic improvement was not an easy task. At the height of the war 1,002 county club agents were employed. To reduce the budget, it was decided in a large number of States to dispense with county club agents and place the full responsibility for the organization of young people on county agricultural and home demonstration agents. On June 30, 1924, the number of club agents employed in counties was 142. (Fig. 28.) In a large number of counties, only one agent was left to organize the work with men, women, boys, and girls, and the enrollment of young people for demonstration work was consequently reduced.

The rapid reduction in the price of farm commodities also had its effect on club members. Pig and beef club members were compelled to take large losses. The continued low level of commodity prices kept a large number of boys out of club work and the enrollment decreased further until 1923. The work with girls was affected also, although in a different way, by the slump in the price of farm products. With decreased farm incomes, less money was available for food, clothing, and living. This condition stimulated the farm girl to increased effort. In order to be suitably dressed and to maintain the standard of the home, she joined the clothing club, the poultry club, or the nutrition club, and through her work in such clubs increased the family income and made the best of the income available.



FIG. 29.—Club members with their baby beeves and 5-acre corn-club field. Both beeves and corn are typical of the results obtained by both boys and girls through extension activities. During the 10-year period, more than 5,000,000 boys and girls have been enrolled as demonstrators of improved practices, and have helped to solve the vital problems of the home, the farm, and the community

DEMONSTRATIONS FUNDAMENTAL

The demonstration as carried on by the individual club member has been fundamental to successful club work. It ties the club member to some definite economic problem of his community and gives him the opportunity to aid in its solution. (Fig. 29.) In the agricultural field, the corn demonstration is typical in its characteristics and development of club work carried on by boys.

The universal interest in corn has made it one of the largest as well as one of the most widely distributed club projects since the work with young people began. The corn-club project has increased in size since early contests in Macoupin County, Ill. At that time the size of the plot was limited to the area that could be planted with 1 ounce of seed, whereas at the present time 1 acre of corn is recognized as a minimum for a satisfactory club project. The more experienced club member enrolls in the 5-acre contest and attempts to qualify as an honorary member of the 100-bushel club. The

2,533 corn clubs in 1924, with a total enrollment of 31,251, demonstrated the testing of seed corn, the value of improved strains, the use of fertilizers, cultivation, hill selection of seed corn, proper storage of seed, and made some outstanding records for production on an acre of ground.

The food-preservation demonstration is typical of club demonstrations carried on by farm girls. The growing of a garden and the canning of surplus fruits and vegetables were among the first projects organized by extension agents. Canning and preserving of food in the farm home is the foundation upon which a health program has often been organized. Material progress has been made in food-preservation work. The earlier program of canning surplus food has been succeeded by the food-canning budget, which provides for the food needs of the farm family through canning a correct quantity of vegetables, greens, fruits, and meat. Canning for the market and special trade has met the need of many farm girls who have required individual incomes for personal expenses and education. In the Southern States, particular emphasis has been placed on the standardization of canned food for the market.

During the 10 years since the passage of the Smith-Lever Act, more than 5,000,000 boys and girls have been enrolled as demonstrators of improved practices.

THE SOCIAL PHASES

Although club work is based on the demonstration conducted by the boy or girl on the farm or in the home, the training for more efficient citizenship has been one of the outstanding results. Young people in clubs have learned to use parliamentary procedure; they have learned to express themselves intelligently at a meeting; and they have learned to sing and participate in wholesome play and contests for the social advantages they afford. They have enjoyed club songs and yells and in their youthful enthusiasm have developed hundreds of songs that have been passed from club to club and are known from coast to coast. During 1924, several of the colleges assembled these club songs in book form and made them available for club meetings. Although many of these songs are adaptations of popular melodies or old folk songs, they have come to be recognized as the popular expression of club work and are finding their way into all rural gatherings.

CAMPS AND FESTIVALS AID BETTER TRAINING

For many years city boys and girls have been given the opportunity to camp in the open during the summer season. The club movement has been responsible for the extension of this ideal summer recreation to the rural boy or girl. The demand for better training in demonstration work has been largely responsible for the introduction of the camp into the club program. It has saved the time of extension workers and specialists and has given country boys and girls an opportunity to swim, play, and study with a large number of other boys and girls with the same interests. Although the camp idea for farm boys is as old as the club movement itself, having been used by A. P. Grout, of Winchester, Ill., as early as 1902, it did not come into general use until after the war. In 1924, 1,774 4-H club camps were held, with an attendance of 52,697 club boys and 61,273 club girls.

In addition to county camps, more pretentious camps have been organized at State fairs, State agricultural colleges, and experiment stations. The club camp at the experiment station at Davis, Calif., has been a model tent camp. The camps at Huron, S. Dak., Sioux City, Iowa, and Springfield, Mass., are typical of permanent camps at fairs and expositions. More pretentious camps with permanent buildings and grounds, under the direction of the State agricultural colleges, have been established at Jackson's Mill, W. Va., and Athens, Ga.

JUNIOR LEADERSHIP EFFECTIVE

Demonstration clubs organized before the passage of the Smith-Lever Act were usually in charge of superintendents of schools and rural teachers. As the value of the work became more appreciated, leading farmers and home makers supplied the leadership while the teacher was away on vacation. With the development of the community program of work and the concentration of effort of men, women, boys, and girls on the community problem, the adult farmer and home maker took the leading part in local leadership work. It was not believed that the older boys and girls could direct the activities of a club.

Interesting experiments in junior leadership were conducted in Massachusetts, California, and Arkansas. The older boys and girls surprised the State leaders and county extension agents with their efficiency and enthusiasm. Junior leadership for demonstration clubs was accepted as a desirable practice during the war and has increased in volume and effectiveness since that time. The training school for junior leaders is now an important part of the club program in a number of States. Minnesota trained more than 400 in 1924. A training school for junior leadership for the Eastern States was established in 1923 at Springfield, Mass., at the expense of a public-spirited citizen. A national trophy in junior leadership is awarded annually to the boy or girl in the United States outstanding in community service and junior leadership. This trophy was won for the first time in 1924 by Ford Mercer, of Oklahoma. It is interesting to note that this prize went to the State where junior leadership of clubs is the prevailing practice in club organization.

SHORT COURSES EXPANDED

The outstanding service to agriculture and home economics rendered by boys and girls in 4-H clubs and their interest in obtaining additional information has led to the extensive development of short courses at State agricultural colleges. The courses of one or two weeks duration are usually held when they do not interfere with the regular college work, either during the Christmas holiday, the spring vacation, or the interim between the spring session and the summer school. Attendance at short courses has varied from 150 to 2,500. The expense for travel to and from short courses has been paid by interested citizens as prizes for excellence in club work. An interesting departure from the usual practice has been developed in Iowa. Each club has earned sufficient money to send one or more members of the club to the short course. More than 300 club members had their expenses paid in this way.

At the end of 1924, the outstanding facts regarding boys' and girls' club work seem to be as follows: There are practically 11,000,000 rural boys and girls between the ages of 10 and 18. Of this number, nearly 3,000,000, or 27 per cent, are not in school. Those not in school are, for the most part, between the ages of 14 and 18. Of the total number of rural boys and girls from 10 to 18, about 510,000 are enrolled in 4-H club work, or 1 in each 22. There probably is no phase of rural extension work more popular, or which the people more willingly support financially than boys' and girls' club work. More and more it is being borne in on administrative officials that money expended for boys' and girls' club work has more prospective and more permanent value than money expended in the teaching of older groups. It is also seen that it has an appeal, not only to the boy and girl in school but to the boy and girl out of school. It does not deal with uninteresting books and theoretical things, but with live plants and animals, living processes, vital problems of the home, the farm, and the community. Through the instrumentality of 4-H club work, many boys and girls found drifting have renewed interest in school work, taken short courses, gone on to college, and have become useful constructive members of society, proficient in their work and proud of their calling. The next decade should see this phase of extension work greatly increased.

NEGRO EXTENSION WORK

It has been possible to build up an extension organization in the South for negro people because of Hampton and Tuskegee Institutes and the many similar but smaller institutions in existence in the Southern States. In fact, the influence of these two institutions has affected all the schools and colleges where negro agents have been educated. T. M. Campbell, of Tuskegee Institute, Ala., and J. B. Pierce, of Hampton Institute, Va., were appointed in 1906 as the first negro extension agents, and now represent the United States Department of Agriculture in relation to negro extension work.

Some of the most successful negro communities in the South can trace their first impulse to improvement to the incentive of teaching which has emphasized land and home ownership, self-help, skilled labor, and moral character. Whenever extension agents have succeeded in multiplying such examples, they have made large contributions to our rural civilization.

NEGRO AGENTS FOR WORK WITH NEGROES

When farmers' cooperative demonstration work was begun in 1903, the demonstration agents at first were all white men, but negro demonstrators were enrolled. These negroes were teachable and appreciative. Often they were more successful than white farmers in putting on demonstrations because they followed instructions more faithfully and carefully. Many instances have been reported where negro farmers were started along the pathway of success because of the stimulation of demonstration work. County agricultural agents often reported 25 per cent of their demonstrators as being negroes, and some negroes usually were present at field meetings and public demonstrations. The same thing happened in the organization of home demonstration work. This type of work with negroes still

continues and the white supervisory agents take a most sympathetic interest in it. In view of the fact that negro women and girls always had done so much of the domestic labor in southern homes and because negro schools and colleges had given courses in home economics, home demonstration work for negroes was started in a most favorable environment and atmosphere. Many white home demonstration agents and demonstrators took pleasure in giving instruction in gardening, canning, and preserving to negro women and girls whom they knew. But, as the work developed, it soon became apparent that negro women agents could get access to the negro homes better than anybody else, so negro home demonstration agents began to be appointed. The first negro home demonstration agent was Annie Peters, of Boley, Okla., who was appointed on January 23, 1912, and the second negro home demonstration agent was Mattie Holmes, of Hampton Institute, appointed May 24, 1912.

PERSONAL EXAMPLE A FUNDAMENTAL EXTENSION INFLUENCE

It often has been observed that negroes are especially responsive to the demonstration method of work because of their faith, confidence, and optimism. It is true that this plan reaches those less educated better than any form of academic instruction, because the demonstrators must be doers before they become teachers. The agent gets other people to make object lessons (fig. 30). The effectiveness of the object lesson or demonstration is measured by the success of the enterprise and the standing and influence of the demonstrator. Judging by this standard, however, the demonstration method is the best for the more highly educated farmer or farm woman. Furthermore, it has been found safe to assume a fair amount of good farm and home development in any intelligent, prosperous community. The negro, in fact, has made sufficient progress for agents to find men, women, boys, and girls in every community who can demonstrate better farming and home making.

The history of extension work for negroes in the South has not been exactly parallel to that of the whites. The white agents started work with men demonstrators followed by boys' clubs, girls' clubs, and home demonstration work. Negro extension work started with men and women first. The agents tried to meet first the most urgent needs of the farms and homes. When the negro agents began later to enroll boys and girls, they did so because they felt that these young folks should have an influence in the development of farming and home making in their communities. It was not so much a matter of teaching and telling as it was of doing and growing.

In the natural process of evolution, negro agents later came to pay more attention to meetings, organization, recreation, and group activities in general, but they never have given up the demonstration idea that "an ounce of demonstration is worth a ton of description." Because of the limited amount of funds available, few counties have both negro men and women agents. Thus it has come about that the negro men agents aid in work relating to the home and the negro women agents in work relating to the farm more than is the case where a county has both farm and home demonstration agents.

During the present period of readjustment, it is becoming more and more apparent to students of extension work that the greatest ultimate reform will take place where the most successful demonstrations of content and size are conducted and where such demon-

strations are multiplied in the greatest numbers. Many negro agents seem to have the ability to encourage their demonstrators and magnify the influence of their work. They have caught the philosophy of the founder of demonstration work, Seaman A. Knapp, who said: "Your value lies not in what you can do but in what you can get other people to do." The negro agents seem to appreciate the standing and power in the community of a man or woman who has done better work than anybody else. They enter into the thought and life of the demonstrator who estimated that more than 50 men in his neighborhood had been influenced by his fine success with 10 acres of cotton grown along the roadside. They feel that the boy who said: "My club acre has been noticed by many people in



FIG. 30.—Negro local leader demonstrating to negro farmers the dusting of cotton for boll-weevil control. Negro farm men and women are especially responsive to the demonstration method and take particular pride in developing a spirit of service

this section and I am sure it will cause some of my boy friends to join the club next year," had developed in himself the real spirit of service. They appreciate the feeling of pride and satisfaction that comes to the girl club member who builds a good poultry house and then has the pleasure of seeing more than a dozen like it built within a radius of 5 miles of her home. In the final analysis the extension tendency is to make every person enrolled feel that he is a potential leader and teacher who must do his best always.

Perhaps the climax of all this kind of object-lesson activity is reached in home and lawn beautification. (Fig. 31.) During the closing part of the past decade the negro extension work showed increasing results in the renovation, painting, and whitewashing of houses and outbuildings, and in the growing of flowers, grass, and shrubbery in the front yards. This, in itself, is a fine index of the progress of a higher civilization.

NEGRO WORK WELL SUPPORTED

The gradual increase in the number of negro agents and also in the appropriations for their support during the past 10 years gives much promise for the development of this work in the future. In 1915, there were 49 negro men agents and 17 women agents, and the total cost of the work was \$31,589. In 1919, there were 459 negro agents and the cost was \$247,509. On June 30, 1924, there were 299 agents, of whom 183 were engaged in agricultural work, 108 in home demonstration work, and 8 in boys' and girls' club work (fig. 32). The total amount of money used during the fiscal year 1924 was \$426,268. This money came mostly from Federal and State sources. More agents were employed during the war, but many of them were on part time. All things considered, therefore, the negro work is making steady and substantial progress every year.



FIG. 31.—This negro farm home, which has been improved through painting, and the addition of flowers, vines, grass, and shrubbery, is typical of thousands of negro homes which have come under the guiding influence of negro extension workers

OUTSTANDING DEVELOPMENTS

Negro farmers have their share in cooperative marketing. They belong to cotton, tobacco, peanut, and potato associations. They follow instructions rather carefully in matters of grading and standardization. They appreciate the opportunity of purchasing fertilizers and other supplies through the farm bureau and other organizations engaged in such enterprises. In some of the counties where marketing associations have given special attention to selling carloads of hogs, chickens, potatoes, pecans, and other products produced in surplus quantities, the negroes do their share. It has come about that almost all the marketing plans which have been developed include the negroes in their operations more extensively than any other form of productive and educational enterprise. Cooperation blankets them in because the commodity is considered rather than the person or the community.

The home demonstration work for negroes also goes forward with certain logical processes. These may be stated in four words, as follows: Production, utilization, construction, and beautification. This, too, is a natural program, which may be followed consciously and intuitively by every person who is properly started in the work. The growth may be outlined in another way by the mere mention of the materials and commodities used in the demonstrations. The negro women and girls start with growing vegetables in the gardens. They begin with the most needed food crops and enlarge their operations gradually. Then they undertake to conserve enough for use throughout the winter. They sell the surplus, fresh and canned. It is an easy step from canning vegetables to the preservation of fruits. Better bread comes next, because of its importance as food and because flour, meal, and grains in general are available. Then the hen and the home cow come in for their share of attention.

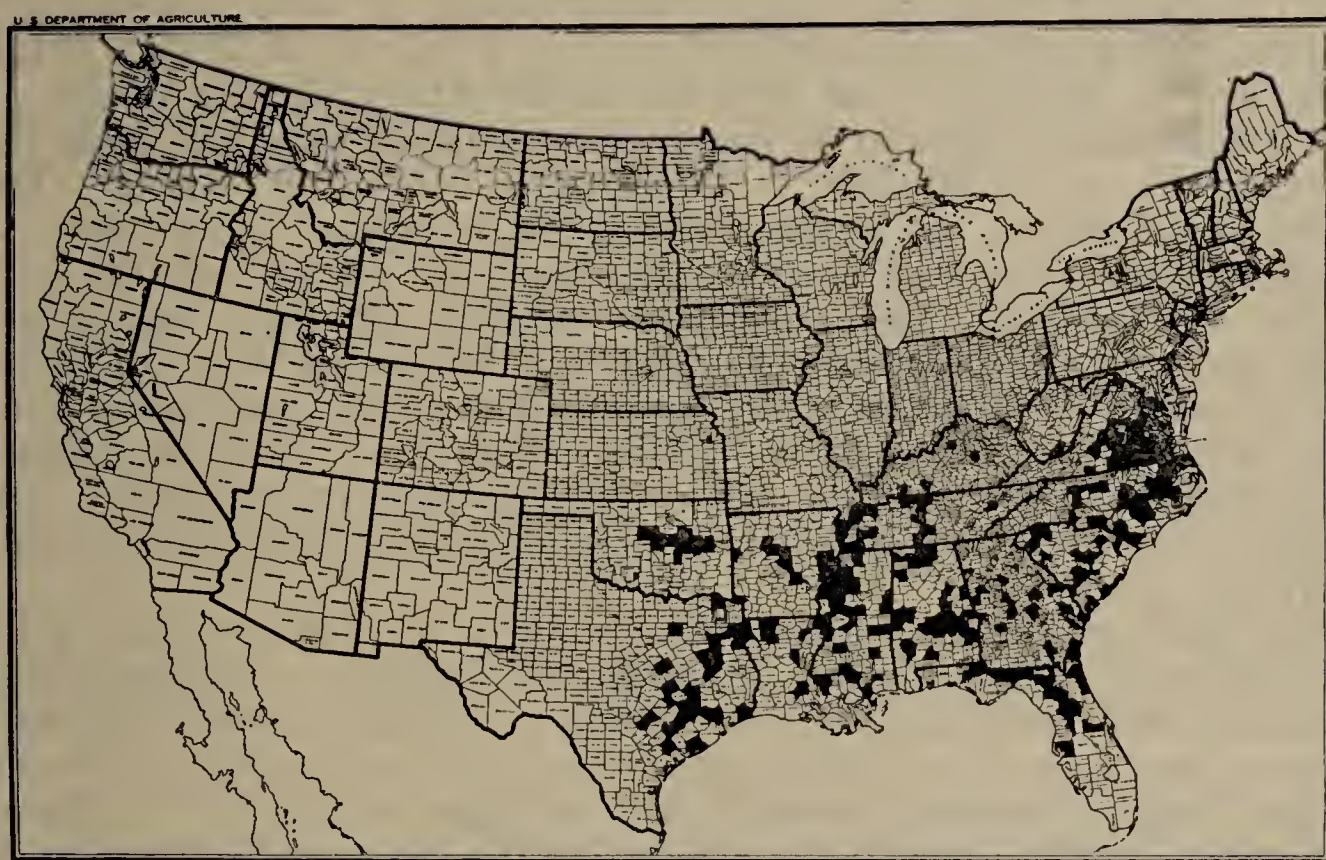


FIG. 32.—Map showing counties (in black) having negro agents, June 30, 1924

Eggs and butter are standardized and poultry meat is properly cooked and canned. This leads to better work with pork, beef, and other meats.

Success in these enterprises gives suggestion and encouragement to home improvement. Then come the demonstrations in rearranging kitchens, living rooms, and homes in general. Better furniture suggests itself and paint and whitewash are in demand. Demonstrations with textiles and fabrics come in incidentally, all along. The girls and women want simple, neat dresses in their work. The club idea suggests uniforms for public demonstrations and meetings. In hundreds of instances, the program culminates with an attractive new home in a beautiful setting of trees, shrubbery, and flowers. Stated briefly, in material things the history of the development is as follows: Vegetables, fruits, cereals, poultry, cows, furnishings, equipment, buildings, and landscape. The beautified home is the climax. The vital thing is for the farmer and home maker to develop a program. This is many times more important

than a superinduced one. The germs of progress exist in the plans and hopes of the people who are actually doing the work on the farms and in the homes.

As has already been indicated, the club work among negro boys and girls has been a secondary development. The close of the 10-year period found a total negro club enrollment in the Southern States of 21,721 boys and 27,114 girls. This shows a big increase since 1916, when the enrollment of negro club members was first recorded separately. At that time the State club agents suggested that the negro boys should be organized into farm makers' clubs and the negro girls into home makers' clubs. The total enrollment for that year was 2,551. Prior to that time many negro boys and girls were in the work, but they did not have such different classification as to make their work stand out and receive proper emphasis and recognition. At the end of the 10-year period, a great many negro boys and girls were also demonstrating to their parents and neighbors that they can clear \$100 to \$300 a year on their club enterprises and at the same time keep up regular attendance in school.

A development peculiar to the negro extension work has been the movable school, or Booker T. Washington school on wheels. The movable school is an automobile truck carrying equipment for demonstration purposes and accompanied by an automobile conveying instructors. The equipment consists of farm and home tools and utensils necessary to illustrate better methods of work. The school goes to a home, by appointment of a local agent, and stays from one to three days. There always is a good attendance of people from the vicinity where the work is to be done. The novelty of the outfit and the rather spectacular nature of the occasion guarantee a crowd.

The local agents and the instructors agree in advance upon what is to be done. The program includes such things as pruning trees, terracing land, proper plowing, building a chicken house, building a sanitary privy, grading fruit, eggs, and vegetables, dressing chickens, making fireless cookers, canning cows or hogs, making work dresses and aprons, and whitewashing or painting the house and outbuildings. The people in attendance are divided into small groups, and several enterprises are carried on at the same time. After the various jobs are completed, the whole crowd goes around on a tour of inspection, and much incidental instruction is driven home by those in charge. In addition to having specialists along farm and home lines, the school usually carries a public-health nurse, who gives much needed instruction and demonstration. A necessary part of the equipment, also, is a motion-picture machine for showing films and slides in the school and church meetings at night. The movable school truck also carries some equipment to facilitate games and play for a short time every day after the regular work is done.

CROP PRODUCTION RESULTS SUBSTANTIAL

Major emphasis has been placed on certain staple and established crops in the work with negroes, so the statistics on these crops are significant. In 1924, 3,659 negro farmers undertook demonstrations with cotton, and 3,072 carried the work to completion and submitted reports. These demonstrations represented a total of 23,043 acres. In addition, 2,630 junior club members planted an acre or more of

cotton and 1,734 of them completed the work and submitted reports. Many of these boys cleared more than \$100 each on their acres and some more than \$200. This is a fair return for boys who put in a regular session at school. Making the usual allowance of about 140 work hours in a year in the production and harvesting of an acre of cotton, these club members earned about \$1 an hour for every hour they worked.

Corn always has been a favorite crop for demonstrations by adults and juniors in the South. This is because it is used so much for food and feed, and also because it responds so well to special attention in that section of the country. The 1924 annual report shows that 4,317 negro farmers undertook demonstrations with corn covering 25,442 acres, of whom 3,292 finished the work in good shape, and that 8,018 club members planted an acre apiece, of whom 4,308 completed the work with marked success. If each successful demonstration should influence only five neighbors, the total number influenced would be impressive. However, real demonstrations of size, success, and continuity are more far-reaching, so it is estimated that, from a demonstration viewpoint alone, the work is effectively influencing probably a million negro farmers and home makers.

In order to continue to produce large crops of cotton and corn, there must be some soil building. This can be done most readily with such crops as cowpeas, soy beans, vetch, velvet beans, clover, and alfalfa. Negro farmers carried on 9,860 demonstrations with leguminous and forage crops in 1924 and reported successes on 8,358 of these enterprises on a total acreage of 54,366. To these totals should be added 2,679 club members enrolled to grow legumes and 1,799 who completed the work on their acres. When it is considered that most of this work was done on rented land and that most of these crops require inoculation and special care, these figures have unusual value. Of course the legumes were not planted altogether for soil-building purposes. Some of them were cash crops and some were grown for feed.

The success of the work of negro farmers with such crops as sweet potatoes, tobacco, and potatoes shows a strong tendency on their part toward diversification in cash and food crops. In many sections of the country negroes have shown marked aptitude for trucking, gardening, and orcharding, and some of the most successful demonstrations in truck farming, from a financial standpoint, have been made by negroes. Some especially good service was rendered by negro farmers in spraying and pruning, which made their results more satisfactory and their examples more potent. In fact, many of these demonstrators became teachers and leaders through the merits of their work.

LIVESTOCK OWNERSHIP INDICATES PROGRESS

The livestock work of negro farmers is unusually significant. The large number of cows, hogs, and chickens owned by them indicates increased land ownership on their part. It throws light also on the increased production of feed crops. During 1924, 9,936 adult farmers and farm women were enrolled as livestock demonstrators, of whom 7,379 completed the year's work and submitted reports. It is safe to assume that most of the 264,432 animals used in making these demonstrations were purebred. Likewise, the fact that negro

boys and girls cared for 102,070 high-class farm animals in their club enterprises indicates that much progress is being made.

Negro demonstrators used 68,126 tons of fertilizer and 8,288 tons of lime in their farm work in 1924, and they plowed under 13,547 acres of cover and green-manure crops in their soil-improvement operations. Terracing was done on 1,738 farms and soil erosion was prevented thereby on 43,299 acres. Drainage systems were installed on 573 farms and 18,405 acres were thereby made more productive and valuable.

The climax of the extension work for negroes comes in the constructive features just the same as for the whites. Special import, therefore, should be attached to the fact that in 1924, 463 barns, 411 hog houses, and 787 poultry houses were built according to plans approved by extension agents. Altogether, some constructive rural-engineering work was done on 3,967 farms under the guidance of county agricultural agents. All this development means that thousands of the best negroes are learning the lessons of thrift, economy, and enterprise. They are realizing more than ever the importance of owning land and building permanent homes. Another decade will probably show even greater results along these lines.

NEGRO WOMEN IMPROVE HOME CONDITIONS

Excellent home demonstration work is being done by a large number of negro women and girls. When it is considered that they do a great deal of work in the cotton, tobacco, and other fields, there is unusual significance in the fact that they are willing and anxious to engage in the special activities which make for better living and better homes. In 1924, 21,509 women and 27,114 girls were enrolled in the various activities which pertain definitely to the improvement of the home. It is interesting, also, to compare the figures in home gardens with those of food preservation and preparation. There seems to be a logical sequence here. There were 12,355 women and 14,641 girls enrolled in home-garden work, whereas 13,911 women and 13,826 girls were enrolled in food preservation. In food preparation, 14,731 women and 16,537 girls were enrolled. As a rule, the work begins with garden demonstrations, so it would seem that the interest increases as the work progresses.

Paint and whitewash are good indexes of improvement and prosperity among negroes. In 1924, 2,259 dwellings were painted or whitewashed as the result of instructions of the agents. Quite a number of the dwellings which were built or remodeled put in running water and lighting and heating systems.

Perhaps no phase of home demonstration work is more valuable among negroes than the activities pertaining to sanitation and health. This work in some of its phases was exemplified in more than 10,000 homes. In 2,361 of them the doors and windows were screened and in 3,781 other methods of insect control and extermination were followed. In most of the Southern States the agents have definite plans with blue prints for the construction of sanitary closets. Altogether, 9,734 women and 10,351 girls were enrolled in the home health and sanitation work.

NEGROES MAKE IMPRESSIVE EXTENSION CONTRIBUTIONS

The statistics showing the results of negro extension work at the close of the 10-year period are not complete, because the figures show the work done under the guidance of negro agents only. Hundreds of white agents have done some work with negroes, but they do not differentiate in reporting. It is probably safe to say that the numbers represented in the 1924 report might be doubled. Now that a system of extension work for negroes by negroes has been evolved gradually, there is more and more a tendency for the responsibility to be turned over to them. Of course, the white agents stand ready at all times to advise and help. The most harmonious relations prevail in all the States. Nothing is quite so encouraging about the whole development as the wholesome public sentiment which sustains the work and encourages the agents. This support is based upon knowledge of good work done and results achieved.

In the conduct of the demonstration work with negroes, the agents made visits to 28,410 different farms and 26,515 homes. It required 86,824 different farm visits and 49,334 different home visits to get the results heretofore reported. Thus it seems that each demonstration farm required an average of three visits and each demonstration home an average of about two visits.

More than a million people attended the special and regular meetings for the promotion of extension work among negroes. To this impressive total the number of fairs and exhibits should be added. Negroes made exhibits at 815 different community, county, and State fairs, and these exhibits were seen and studied by thousands of people.

The extension work for negroes and by negroes has been built practically in the last 10 years. It is a substantial development in such a short time. It took about the same length of time to build a similar organization for white people. When it is remembered that negro extension work has been established in a period of transition, turmoil, and readjustment, the significance is all the more remarkable. It is a fine tribute to the good work of the negro agents that, when the period of retrenchment came soon after the great war, their force and their appropriations were the only ones which were not reduced. The work is established, the pioneer workers have done well. The future is a matter of expansion and improved service.

STATISTICS

[Funds for extension work are appropriated for fiscal years ending on June 30, whereas extension agents are required to prepare their reports for calendar years. For this reason, the statements of funds expended are for the fiscal year ended June 30, 1924, and the statistics of results of work done are for the calendar year ended Dec. 31, 1924]

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924.*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents ¹		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Communities in counties.....	2, 203	42, 522	934	25, 997	125	7, 831	3, 262	76, 350
Communities with extension program.....	2, 123	28, 499	933	16, 624	125	4, 341	3, 181	49, 464
Voluntary local leaders:								
Adult.....	1, 915	112, 474	741	32, 265	13	273	2, 669	145, 012
Junior.....	1, 647	22, 682	662	9, 274	131	5, 949	2, 440	37, 905
Adult clubs.....	1, 169	16, 946	842	10, 981	10	83	2, 021	28, 010
Membership in adult clubs....	1, 029	338, 915	850	218, 018	6	414	1, 885	557, 347
Junior clubs.....	1, 804	18, 845	814	11, 042	135	8, 233	2, 753	38, 120
Enrollment—								
Boys.....	1, 865	147, 134	303	18, 977	131	43, 699	2, 299	209, 810
Girls.....	1, 331	89, 170	838	162, 034	135	49, 341	2, 304	300, 545
Completions—								
Boys.....	1, 666	78, 753	240	7, 056	128	31, 138	2, 034	116, 947
Girls.....	1, 136	52, 432	740	79, 265	133	34, 639	2, 009	166, 336
Farin visits made.....	2, 274	1, 259, 380	199	37, 936	115	45, 434	2, 588	1, 342, 750
Different farms visited.....	2, 226	657, 044	194	20, 365	112	22, 717	2, 532	700, 126
Home visits made.....	981	136, 397	937	231, 225	89	22, 098	2, 007	389, 720
Different homes visited.....	951	83, 851	915	134, 882	86	12, 411	1, 952	231, 144
Office calls.....	2, 260	2, 656, 691	940	360, 825	107	29, 562	3, 307	3, 047, 078
Telephone calls.....	2, 029	1, 759, 018	869	372, 796	105	38, 165	3, 003	2, 169, 979
Percentage of time in field.....		67		67		65		67
Percentage of time in office.....		33		33		35		33
Individual letters written.....	2, 252	2, 905, 110	939	751, 406	122	111, 821	3, 313	3, 768, 337
Leader-training meetings held..	1, 265	16, 575	579	8, 139	92	1, 298	1, 936	26, 012
Attendance at such meetings....	1, 249	127, 105	571	80, 472	90	8, 718	1, 910	216, 295
Method and result demonstra- tions:								
Meetings held.....	2, 082	211, 355	876	191, 289	116	14, 430	3, 074	417, 074
Attendance.....	2, 074	3, 792, 660	858	3, 361, 680	116	218, 260	3, 048	7, 372, 600
Total number of all meetings....		351, 582		240, 141		31, 330		623, 053
Total attendance.....		12, 573, 850		5, 691, 134		695, 430		18, 960, 414
Meetings at which lantern slides were shown.....	778	7, 204	202	1, 095	48	535	1, 028	8, 834
Meetings at which motion pic- tures were shown.....	1, 315	24, 850	373	3, 415	54	591	1, 742	28, 856
Soils:								
Adult result demonstrations	1, 534	38, 575			2	14	1, 536	38, 589
Farms following advice in use of commercial fertil- izer.....	1, 410	167, 843			3	43	1, 413	167, 886
Farms using lime or lime- stone on advice.....	1, 175	34, 617			3	21	1, 178	34, 638
Farms taking better care of farm manure.....	994	49, 780			2	65	996	49, 845
Farms plowing under green- manure crop.....	1, 107	25, 449			1	6	1, 108	25, 455
Different farms adopting better practices.....	1, 900	262, 231			3	120	1, 903	262, 351
Corn:								
Adult result demonstra- tions.....	1, 234	13, 865			3	27	1, 237	13, 892
Junior ² demonstrations.....	920	16, 006			62	1, 317	982	17, 323
Farms planting improved seed.....	1, 317	42, 535			20	196	1, 337	42, 731
Farms practicing seed se- lection.....	1, 162	44, 058			17	173	1, 179	44, 231
Different farms adopting better practices.....	1, 604	106, 289			34	409	1, 638	106, 698

¹ Includes a small amount of club work in counties without extension agents, reported by State club leaders.

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Wheat:								
Adult result demonstra- tions.....	685	8,515			1	15	686	8,530
Junior ² demonstrations.....	51	715			3	8	54	723
Farms planting improved seed.....	682	15,082			2	2	684	15,034
Farms practicing seed selec- tion.....	219	2,173			1	2	220	2,175
Farms treating seed for smut.....	491	8,315			2	9	493	8,324
Different farms adopting better practices.....	964	36,850			3	58	967	36,908
Oats:								
Adult result demonstra- tions.....	711	5,828			1	4	712	5,832
Junior ² demonstrations.....	44	210					44	210
Farms planting improved seed.....	672	11,479			1	8	673	11,487
Farms practicing seed selec- tion.....	204	2,183			1	5	205	2,188
Farms treating seed for smut.....	461	9,396					461	9,396
Different farms adopting better practices.....	997	32,723			1	8	998	32,731
Rye:								
Adult result demonstra- tions.....	259	1,841					259	1,841
Junior ² demonstrations.....	6	43					6	43
Farms planting improved seed.....	245	2,505					245	2,505
Farms practicing seed selec- tion.....	61	410					61	410
Different farms adopting better practices.....	396	5,274					396	5,274
Barley:								
Adult result demonstra- tions.....	241	1,117					241	1,117
Junior ² demonstrations.....	19	73			1	1	20	74
Farms planting improved seed.....	259	2,636			1	1	260	2,637
Farms practicing seed selec- tion.....	82	527					82	527
Different farms adopting better practices.....	360	4,748			1	2	361	4,750
Other cereals:								
Adult result demonstra- tions.....	197	2,452					197	2,452
Junior ² demonstrations.....	74	1,111			5	831	79	1,942
Farms planting improved seed.....	142	3,717			1	5	143	3,722
Farms practicing seed selec- tion.....	76	1,679					76	1,679
Different farms adopting better practices.....	290	11,068			1	5	291	11,073
Alfalfa:								
Adult result demonstra- tions.....	940	14,052			1	1	941	14,053
Junior ² demonstrations.....	25	501			4	14	29	515
Farms planting improved seed.....	827	29,669			2	4	829	29,673
Farms practicing seed selec- tion.....	113	1,423					113	1,423
Farms inoculating for this crop.....	907	32,115			2	5	909	32,120
Different farms adopting better practices.....	1,314	56,290			3	7	1,317	56,297

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Soy beans:								
Adult result demonstra- tions.....	1,027	14,905					1,027	14,905
Junior ² demonstrations.....	90	795			3	16	93	811
Farms planting improved seed.....	792	24,666					792	24,666
Farms practicing seed selec- tion.....	300	5,294					300	5,294
Farms inoculating for this crop.....	774	26,548			1	1	775	26,549
Different farms adopting better practices.....	1,301	60,097			1	4	1,302	60,101
Sweet clover:								
Adult result demonstra- tions.....	661	7,626					661	7,626
Junior ² demonstrations.....	12	85					12	85
Farms planting improved seed.....	487	10,390					487	10,390
Farms practicing seed selec- tion.....	85	1,246					85	1,246
Farms inoculating for this crop.....	550	8,117					550	8,117
Different farms adopting better practices.....	995	24,082					995	24,082
Crimson clover:								
Adult result demonstra- tions.....	201	1,965					201	1,965
Junior ² demonstrations.....	5	16					5	16
Farms planting improved seed.....	106	1,110					106	1,110
Farms practicing seed selec- tion.....	30	345					30	345
Farms inoculating for this crop.....	147	1,329					147	1,329
Different farms adopting better practices.....	293	4,922					293	4,922
Clover (red, alsike, white):								
Adult result demonstrations.....	280	3,202					280	3,202
Junior ² demonstrations.....	3	17					3	17
Farms planting improved seed.....	213	5,623					213	5,623
Farms practicing seed selec- tion.....	43	405					43	405
Farms inoculating for this crop.....	199	2,121					199	2,121
Different farms adopting better practices.....	457	11,297					457	11,297
Cowpeas:								
Adult result demonstra- tions.....	436	5,836					436	5,836
Junior ² demonstrations.....	56	733					56	733
Farms planting improved seed.....	184	1,934					184	1,934
Farms practicing seed selec- tion.....	98	959					98	959
Farms inoculating for this crop.....	131	847					131	847
Different farms adopting better practices.....	529	11,143					529	11,143
Velvet beans:								
Adult result demonstra- tions.....	247	3,553					247	3,553
Junior ² demonstrations.....	27	327					27	327
Farms planting improved seed.....	105	1,376					105	1,376
Farms practicing seed selec- tion.....	68	771					68	771
Farms inoculating for this crop.....	27	103					27	103
Different farms adopting better practices.....	266	7,518					266	7,518

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Field beans:								
Adult result demonstra- tions.....	106	514					106	514
Junior ² demonstrations.....	16	146			11	78	27	224
Farms planting improved seed.....	85	1, 135			2	14	87	1, 149
Farms practicing seed selec- tion.....	50	579			1	20	51	599
Farms inoculating for this crop.....	24	117					24	117
Different farms adopting better practices.....	139	2, 086			4	36	143	2, 122
Peanuts:								
Adult result demonstra- tions.....	253	2, 239					253	2, 239
Junior ² demonstrations.....	215	1, 681					215	1, 681
Farms planting improved seed.....	143	1, 884					143	1, 884
Farms practicing seed selec- tion.....	102	990					102	990
Farms inoculating for this crop.....	20	105					20	105
Different farms adopting better practices.....	289	5, 753					289	5, 753
Lespedeza:								
Adult result demonstra- tions.....	292	3, 408					292	3, 408
Junior ² demonstrations.....	3	24					3	24
Farms planting improved seed.....	156	2, 730					156	2, 730
Farms practicing seed selec- tion.....	49	1, 378					49	1, 378
Farms inoculating for this crop.....	32	140					32	140
Different farms adopting better practices.....	365	10, 862					365	10, 862
Pastures:								
Adult result demonstra- tions.....	644	8, 384					644	8, 384
Junior ² demonstrations.....	9	55			1	4	10	59
Farms planting improved seed.....	234	3, 247					234	3, 247
Farms practicing seed selec- tion.....	27	183					27	183
Farms inoculating for this crop.....	68	556					68	556
Different farms adopting better practices.....	760	13, 864			1	4	761	13, 868
Other legumes and forage crops:								
Adult result demonstra- tions.....	238	2, 831					238	2, 831
Junior ² demonstrations.....	12	91					12	91
Farms planting improved seed.....	131	2, 834					131	2, 834
Farms practicing seed selec- tion.....	49	800					49	800
Farms inoculating for this crop.....	102	3, 601					102	3, 601
Different farms adopting better practices.....	322	10, 061					322	10, 061
Potatoes:								
Adult result demonstrations	908	9, 795			2	41	910	9, 836
Junior ² demonstrations.....	448	6, 062			82	3, 660	530	9, 722
Farms planting improved seed.....	815	25, 866			37	670	852	26, 536
Farms practicing seed selection.....	493	6, 053			27	392	520	6, 445
Farms treating seed for disease.....	750	13, 929			26	343	776	14, 272
Farms spraying or dusting for disease and insects.....	617	10, 801			18	154	635	10, 955
Different farms adopting better practices.....	1, 216	58, 763			55	1, 187	1, 271	59, 950

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Sweet potatoes:								
Adult result demonstrations	379	3, 249	-----	-----	-----	-----	379	3, 249
Junior ² demonstrations	202	1, 420	-----	-----	3	21	205	1, 441
Farms planting improved seed	216	3, 092	-----	-----	-----	-----	216	3, 092
Farms practicing seed selection	186	2, 142	-----	-----	1	6	187	2, 148
Farms treating seed for disease	217	2, 992	-----	-----	-----	-----	217	2, 992
Farms spraying for disease and insects	65	621	-----	-----	-----	-----	65	621
Different farms adopting better practices	461	10, 444	-----	-----	1	6	462	10, 450
Cotton:								
Adult result demonstrations	761	15, 914	-----	-----	-----	-----	761	15, 914
Junior ² demonstrations	505	9, 827	-----	-----	1	2	506	9, 829
Farms planting improved seed	504	29, 144	-----	-----	1	2	505	29, 146
Farms practicing seed selection	360	9, 033	-----	-----	1	2	361	9, 035
Farms treating seed for disease	53	982	-----	-----	-----	-----	53	982
Farms spraying or dusting for disease and insects	380	33, 846	-----	-----	-----	-----	380	33, 846
Different farms adopting better practices	786	94, 970	-----	-----	1	2	787	94, 972
Tobacco:								
Adult result demonstrations	189	2, 281	-----	-----	-----	-----	189	2, 281
Junior ² demonstrations	61	513	-----	-----	-----	-----	61	513
Farms planting improved seed	90	2, 721	-----	-----	-----	-----	90	2, 721
Farms practicing seed selection	51	675	-----	-----	-----	-----	51	675
Farms treating seed for disease	49	2, 941	-----	-----	-----	-----	49	2, 941
Farms spraying or dusting for disease or insect pests	94	2, 833	-----	-----	-----	-----	94	2, 833
Different farms adopting better practices	227	15, 000	-----	-----	-----	-----	227	15, 000
Other miscellaneous crops:								
Adult result demonstrations	159	1, 600	-----	-----	-----	-----	159	1, 600
Junior ² demonstrations	32	341	-----	-----	1	43	33	384
Farms planting improved seed	79	1, 751	-----	-----	-----	-----	79	1, 751
Farms practicing seed selection	43	507	-----	-----	-----	-----	43	507
Farms treating seed for disease	31	858	-----	-----	-----	-----	31	858
Farms spraying or dusting for disease and insects	61	1, 453	-----	-----	1	98	62	1, 551
Different farms adopting better practices	208	6, 776	-----	-----	1	98	209	6, 874
Tree fruits:								
Adult result demonstrations	1, 143	16, 236	1	4	1	3	1, 145	16, 243
Junior ² demonstrations	66	420	1	1	6	59	73	480
Farms planting improved stock or seed	541	8, 195	-----	-----	1	5	542	8, 200
Farms adopting better pruning methods	1, 141	16, 099	1	1	1	5	1, 143	16, 105
Farms spraying or otherwise treating for disease or insect pests	1, 191	18, 172	1	2	1	1	1, 193	18, 175
Different farms adopting better practices	1, 597	64, 069	1	2	3	12	1, 601	64, 083
Bush and small fruits:								
Adult result demonstrations	271	1, 641	1	3	-----	-----	272	1, 644
Junior ² demonstrations	27	286	-----	-----	7	71	34	357
Farms planting improved stock or seed	222	1, 975	-----	-----	-----	-----	222	1, 975
Farms adopting better pruning methods	224	1, 784	-----	-----	-----	-----	224	1, 784
Farms spraying or otherwise treating for disease or insect pests	245	2, 044	-----	-----	-----	-----	245	2, 044
Different farms adopting better practices	528	7, 298	1	3	2	12	531	7, 313

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents ¹		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Grapes:								
Adult result demonstra- tions.....	368	2, 796					368	2, 796
Junior ² demonstrations.....	7	41			2	45	9	86
Farms planting improved stock or seed.....	198	1, 575			1	3	199	1, 578
Farms adopting better pruning methods.....	391	3, 604			1	4	392	3, 608
Farms spraying or other- wise treating for disease or insect pests.....	323	3, 358			1	6	324	3, 364
Different farms adopting better practices.....	659	9, 154			3	47	662	9, 201
Market gardening:								
Adult result demonstra- tions.....	410	6, 176	1	2			411	6, 178
Junior ² demonstrations.....	47	473			12	194	59	667
Farms planting improved stock or seed.....	208	4, 814			2	14	210	4, 823
Farms adopting better pruning methods.....	34	1, 373					34	1, 373
Farms spraying or other- wise treating for disease or insect pests.....	251	6, 982			1	2	252	6, 984
Different farms adopting better practices.....	551	20, 602	1	2	5	45	557	20, 647
Home gardens:								
Adult result demonstra- tions.....	305	6, 627	346	23, 458	2	73	653	30, 158
Junior ² demonstrations.....	155	8, 959	379	22, 341	82	10, 496	616	41, 796
Farms planting improved stock or seed.....	137	2, 764			7	576	144	3, 340
Farms adopting better pruning methods.....	30	503			1	200	31	703
Farms spraying or other- wise treating for disease or insect pests.....	260	5, 808	319	12, 560	17	877	596	19, 245
Different farms adopting better practices.....	517	22, 602	535	66, 639	39	2, 339	1, 091	91, 580
Beautifying home grounds:								
Adult result demonstra- tions.....	324	2, 380	235	11, 104	1	7	590	13, 491
Junior ² demonstrations.....	16	411	231	12, 282	7	73	254	12, 766
Farms planting improved stock or seed.....	129	1, 593			1	8	130	1, 601
Farms adopting better pruning methods.....	71	563			1	3	72	566
Farms spraying or other- wise treating for disease or insect pests.....	85	917					85	917
Different farms adopting better practices.....	492	8, 373	449	39, 376	7	376	948	48, 125
Forestry:								
Adult result demonstra- tions.....	247	1, 719					247	1, 719
Junior ² demonstrations.....	7	165			5	53	12	218
Forest or wood-lot plant- ings made.....	147	1, 452			5	41	152	1, 493
Farms assisted in wood-lot management.....	155	1, 064			2	7	157	1, 071
Farms planting windbreaks	153	815			1	2	154	817
Farms attempting to con- trol white-pine blister rust.....	31	418			2	19	33	437
Different farms adopting better practices.....	363	5, 596			2	32	365	5, 628
Rodents and other animal pests:								
Adult result demonstra- tions.....	299	9, 726					299	9, 726
Farms adopting control measures.....	525	74, 066					525	74, 066

¹ Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Grasshoppers and other insect pests:								
Adult result demonstra- tions.....	355	16,800	-----	-----	1	1	356	16,801
Farms adopting control measures.....	507	107,154	-----	-----	1	1	508	107,155
Dairy cattle:								
Adult result demonstra- tions.....	795	13,118	183	5,698	-----	-----	978	18,816
Junior ² demonstrations.....	640	8,731	106	1,692	111	4,036	857	14,459
Farms assisted in obtain- ing purebred sires.....	1,356	11,425	-----	-----	34	139	1,390	11,564
Farms assisted in obtain- ing high-grade or pure- bred females.....	1,183	14,465	-----	-----	59	519	1,242	14,984
Farms culling herds.....	676	14,063	-----	-----	14	54	690	14,117
Bull associations organized during year.....	228	428	-----	-----	2	2	230	430
Members in bull associa- tions.....	222	6,438	-----	-----	2	29	224	6,467
Breed associations organ- ized during year.....	156	263	-----	-----	5	8	161	271
Members in breed associa- tions.....	176	6,059	-----	-----	5	60	175	6,119
Cow-testing associations organized or reorganized during year.....	518	916	-----	-----	1	2	519	918
Members in cow-testing associations.....	525	19,354	-----	-----	1	48	526	19,402
Other farms testing cows for production.....	740	34,976	-----	-----	10	68	750	35,044
Cows under test by such associations and individ- ual farms.....	858	321,901	-----	-----	9	145	867	322,046
Farms adopting improved practices in the sanitary production and care of milk.....	924	44,124	283	13,350	6	70	1,213	57,544
Farms feeding better-bal- anced rations.....	1,376	43,947	213	10,280	26	243	1,615	54,470
Farms controlling insect pests.....	389	11,025	-----	-----	3	14	392	11,039
Farms directly influenced to test animals for tuber- culosis.....	1,149	276,708	-----	-----	20	348	1,169	277,056
Farms directly influenced to vaccinate animals for blackleg.....	334	6,392	-----	-----	-----	-----	334	6,392
Different farms adopting better practices.....	1,818	341,903	317	31,415	77	2,174	2,212	375,492
Beef cattle:								
Adult result demonstra- tions.....	329	1,724	-----	-----	-----	-----	329	1,724
Junior ² demonstrations.....	396	4,291	-----	-----	29	809	425	5,100
Farms assisted in obtain- ing purebred sires.....	625	4,418	-----	-----	5	7	630	4,425
Farms assisted in obtain- ing high-grade or pure- bred females.....	337	1,780	-----	-----	4	9	341	1,789
Farms culling herds.....	111	1,584	-----	-----	3	4	114	1,588
Bull associations organized during year.....	20	31	-----	-----	-----	-----	20	31
Members in bull associa- tions.....	18	401	-----	-----	-----	-----	18	401
Breed associations organ- ized during year.....	17	27	-----	-----	-----	-----	17	27
Members in breed associa- tions.....	17	456	-----	-----	-----	-----	17	456
Farms feeding better-bal- anced rations.....	326	3,957	-----	-----	1	12	327	3,969
Farms controlling insect pests.....	106	1,566	-----	-----	-----	-----	106	1,566
Farms directly influenced to test animals for tuber- culosis.....	299	78,401	-----	-----	-----	14	301	78,415

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Beef cattle—Continued.								
Farms directly influenced to vaccinate animals for blackleg.....	342	6,705					342	6,705
Different farms adopting better practices.....	917	94,186			12	137	929	94,323
Swine:								
Adult result demonstra- tions.....	728	7,856			1	2	729	7,858
Junior ² demonstrations.....	1,115	18,396	1	9	93	2,784	1,209	21,189
Farms assisted in obtaining purebred sires.....	1,065	9,477			23	70	1,088	9,547
Farms assisted in obtaining high-grade or purebred females.....	831	8,529			34	349	865	8,878
Farms culling herds.....	203	2,283			6	30	209	2,313
Boar associations organized during year.....	50	159			3	12	53	171
Members in boar associa- tions.....	52	1,199			3	92	55	1,291
Breed associations organ- ized during year.....	41	86			1	4	42	90
Members in breed associa- tions.....	43	880			1	20	44	900
Farms feeding better-bal- anced rations.....	600	13,718			10	156	610	13,874
Farms controlling insect pests.....	375	8,872			4	22	379	8,894
Farms directly influenced to vaccinate for cholera.....	769	31,687			6	64	775	31,751
Different farms adopting better practices.....	1,423	72,138			42	798	1,465	72,936
Sheep:								
Adult result demonstrations	319	2,800					319	2,800
Junior ² demonstrations.....	236	1,659			51	656	287	2,315
Farms assisted in obtaining purebred sires.....	631	3,536			10	44	641	3,580
Farms assisted in obtaining high-grade or purebred females.....	419	2,755			16	96	435	2,851
Farms culling flocks.....	168	1,025			4	15	172	1,040
Ram associations organized during year.....	23	33			2	5	25	38
Members in ram associa- tions.....	21	162			1	8	22	170
Breed associations organ- ized during year.....	12	14			1	1	13	15
Members in breed associa- tions.....	12	249			1	22	13	271
Farms feeding better-bal- anced rations.....	233	2,612			1	4	234	2,616
Farms controlling insect pests.....	200	2,822					200	2,822
Different farms adopting better practices.....	804	14,939			18	297	822	15,236
Poultry:								
Adult result demonstrations	1,178	19,906	434	21,499	6	106	1,618	41,511
Junior ² demonstrations.....	736	22,733	407	19,868	121	8,438	1,264	51,039
Farms assisted in obtaining purebred cockerels.....	1,122	22,344	460	10,041	23	258	1,605	32,643
Farms assisted in obtaining high-grade or purebred females.....	801	23,774			35	881	836	24,655
Farms culling flocks.....	1,679	67,639	495	20,242	41	693	2,215	88,574
Breed associations organ- ized during year.....	148	383			1	6	149	389
Members in breed associa- tions.....	136	7,196			1	54	137	7,250
Farms feeding better-bal- anced rations.....	1,006	48,648	497	27,908	22	456	1,525	77,012
Farms controlling insect pests.....	810	26,249	402	21,825	17	323	1,229	48,397
Different farms adopting better practices.....	1,873	160,356	579	70,418	73	2,917	2,525	233,691

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Other livestock:								
Adult result demonstrations	18	411					18	411
Junior ² demonstrations	18	656			25	911	43	1,567
Farms assisted in obtaining purebred sires	28	172					28	172
Farms assisted in obtaining high-grade or purebred females	17	50					17	50
Farms culling herds	10	418					10	418
Associations organized dur- ing year	6	6					6	6
Members in these associa- tions	5	123					5	123
Breed associations organ- ized during year	6	11					6	11
Members in breed associa- tions	4	153					4	153
Farms feeding better-bal- anced rations	8	65					8	65
Farms controlling insect pests	11	239					11	239
Different farms adopting better practices	81	2,647			6	72	87	2,719
Rural engineering:								
Adult result demonstrations	920	14,258	136	3,206	1	4	1,057	17,468
Farms installing drainage systems	718	5,016			1	3	719	5,019
Farms installing irrigation systems	198	1,380					198	1,380
Farms constructing terraces or soil dams	786	24,451					786	24,451
Dwellings constructed ac- cording to plans fur- nished	362	1,560	92	514			454	2,074
Dwellings remodeled ac- cording to plans furnished	302	1,490	157	1,102	1	2	460	2,594
Sewage-disposal systems in- stalled according to plans furnished	508	2,290	100	581	1	1	609	2,872
Water systems installed ac- cording to plans furnished	466	1,454	200	1,106	1	1	667	2,561
Heating systems installed according to plans fur- nished	92	265	52	152			144	417
Lighting systems installed according to plans fur- nished	229	1,162	131	873			360	2,035
Farms constructing or re- modeling buildings other than dwellings according to plans furnished	1,497	21,419	1	1	6	37	1,504	21,457
Farms clearing land	810	50,591			1	12	811	50,603
Different farms adopting better practices	1,825	105,950	326	8,426	8	111	2,159	114,487
Farm management:								
Farms keeping farm ac- counts	922	16,835			4	32	926	16,867
Farms making recom- mended changes in busi- ness	540	6,364			2	14	542	6,378
Other farms adopting crop- ping, livestock, or com- plete farming systems ac- cording to recommenda- tions	751	23,910					751	23,910
Junior ² demonstrations	119	5,896			11	89	130	5,985
Farms advised relative to leases	944	11,898					944	11,898
Farms assisted in keeping cost-of-production records	754	15,504			1	6	755	15,510
Different farms adopting better practices	1,270	63,929			5	64	1,275	63,993

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Credit:								
Membership in farm-loan or other credit associa- tions organized during year.....	128	6,999					128	6,999
Other farms assisted in ob- taining credit.....	593	12,124			1	26	594	12,150
Marketing:								
Cooperative-marketing as- sociations organized dur- ing year.....	630	987	110	158			740	1,145
Members in these associa- tions.....	610	102,510	117	8,213			727	110,723
Total value of purchases.....	333	\$3,932,728	17	\$36,163			350	\$3,968,891
Savings in connection with such purchases.....	321	\$631,090	14	\$8,607			335	\$639,697
Total value of sales.....	393	\$14,796,286	100	\$433,724			493	\$15,230,010
Profits in connection with such sales.....	332	\$1,578,763	82	\$89,286			414	\$1,668,049
Cooperative-marketing as- sociations previously or- ganized.....	923	1,834	102	137			1,025	1,971
Members in these associa- tions.....	909	450,734	86	4,692			995	455,426
Total value of purchases.....	604	\$27,308,909	20	\$8,149			624	\$27,317,058
Savings in connection with such purchases.....	579	\$3,610,945	10	\$1,473			589	\$3,612,418
Total value of sales.....	665	\$186,178,433	76	\$681,102			741	\$186,859,535
Profits in connection with such sales.....	595	\$14,854,723	40	\$191,112			635	\$15,045,835
Food preparation:								
Adult result demonstra- tions.....	33	684	481	59,231			514	59,915
Junior ² demonstrations.....	142	2,709	604	43,028	103	4,709	849	50,446
Women adopting improved practices in bread making.....	32	1,867	596	45,428	2	15	630	47,310
Women adopting improved practices in meat cookery.....	41	1,553	494	33,770	1	14	536	35,337
Women adopting improved practices in vegetable cookery.....	53	2,647	593	56,658	2	54	648	59,359
Women adopting improved practices in preparation of dairy-product dishes.....	50	2,008	490	33,835	1	14	541	35,857
Women adopting improved practices in meal prepar- ation.....	52	2,381	586	48,238	2	17	640	50,636
Homes budgeting the fami- ly food supply.....	49	697	329	11,117	9	120	387	11,934
Different homes adopting better practices.....	171	10,988	759	123,062	73	4,487	1,003	138,537
Food preservation:								
Adult result demonstra- tions.....	27	610	460	58,153	1	4	488	58,767
Junior ² demonstrations.....	190	3,707	619	34,851	102	5,895	911	44,453
Women adopting improved practices in preserving fruits and vegetables.....	89	3,069	713	90,180	7	98	809	93,347
Women adopting improved practices in preserving meats and fish.....	73	2,251	539	38,262	4	20	616	40,533
Homes providing better food storage.....	70	1,915	400	19,403	24	304	494	21,622
Different homes adopting better practices.....	204	9,148	744	132,536	78	3,052	1,026	144,736
Quarts of food products canned.....	176	382,789	651	13,079,730	96	239,033	923	13,701,552
Pounds of fruits and vege- tables dried.....	19	43,773	519	634,083	8	735	546	678,591
Pounds of meats cured.....	21	52,451	406	8,666,935	2	10,654	429	8,730,040

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
Nutrition:								
Adult result demonstra- tions.....	60	3,361	403	24,756	1	1	464	28,118
Junior ² demonstrations....	87	1,892	317	26,084	33	1,836	437	29,812
Women balancing family meals according to ap- proved methods.....	82	13,242	498	31,319	2	429	582	44,99
Women preparing better school lunches.....	45	2,609	421	25,554	1	16	467	28,179
Schools induced to serve a hot dish or school lunch...	104	496	439	2,103	18	96	561	2,695
Homes carrying out im- proved practices in child feeding.....	72	3,991	456	21,634	8	576	536	26,201
Different homes adopting better practices.....	209	23,138	706	99,507	21	1,672	936	124,317
Clothing:								
Adult result demonstrations	135	7,824	517	67,175	4	587	656	75,586
Junior ² demonstrations....	413	21,916	711	59,499	128	19,472	1,252	100,887
Women adopting im- proved practices in selec- tion and construction....	243	55,090	731	96,101	10	1,576	984	152,767
Women adopting im- proved practices in reno- vation and remodeling....	161	12,027	619	44,459	3	204	783	56,690
Women adopting im- proved practices in mil- linery.....	198	17,981	695	68,976	8	290	901	87,247
Women adopting im- proved practices in cos- tume designing.....	91	10,917	429	37,831	4	412	524	49,160
Women adopting im- proved practices in in- fants' wardrobe planning...	27	1,958	307	8,160	1	75	335	10,193
Women adopting im- proved practices in chil- dren's wardrobe planning	47	3,763	412	20,997	2	360	461	25,120
Women adopting im- proved practices in adults' wardrobe planning.....	66	7,475	459	38,203	2	328	527	46,006
Different homes adopting better practices.....	487	78,907	883	199,321	93	13,903	1,463	292,131
Dress forms made.....	258	10,548	713	22,264	5	334	976	33,146
Dresses and coats made....	219	41,653	693	370,217	100	17,576	1,012	429,446
Undergarments made.....	234	26,776	680	452,367	99	17,077	1,013	496,220
Hats made.....	187	19,718	718	116,250	40	1,513	945	137,481
Home management:								
Adult result demonstrations	28	469	389	18,156			417	18,625
Junior ² demonstrations....	27	127	159	8,077	20	227	206	8,431
Women following a system- atized plan of household work.....	26	2,062	268	8,972			294	11,034
Homes obtaining addi- tional labor - saving equipment.....	81	2,233	623	34,105	3	31	707	36,369
Kitchens planned and rear- ranged for convenience....	77	1,269	582	12,326	8	65	667	13,660
Women following improved laundry practices.....	12	127	234	5,629			246	5,756
Women making budgets and keeping accounts....	32	1,213	318	4,955			350	6,168
Different homes adopting better practices.....	132	7,905	653	50,967	17	148	802	59,020
House furnishings:								
Adult result demonstrations	16	4,990	333	14,061	1	11	350	19,062
Junior ² demonstrations....	13	198	243	9,996	12	325	268	10,519
Women adopting im- proved practices in selec- tion and arrangement....	33	2,642	483	23,755	2	81	518	26,478
Women adopting im- proved practices in re- pairing and remodeling....	30	1,038	461	18,544	2	76	493	19,658

² Boys' and girls' club members.

TABLE 4.—*Statistical summary of results of cooperative extension work, 1924—Continued*

Project or line of work	Reported by county agricultural agents		Reported by home demonstra- tion agents		Reported by club agents		Total	
	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number	Agents report- ing	Number
House furnishings—Contd.								
Women adopting im- proved practices in wall, woodwork, and floor treatment.....	23	1, 434	472	16, 614	2	104	497	18, 152
Different homes adopting better practices.....	60	6, 763	612	54, 885	15	419	687	62, 067
Home health and sanitation:								
Adult result demonstrations	32	959	199	13, 013	-----	-----	231	13, 972
Junior ² demonstrations.....	21	750	198	23, 568	5	216	224	24, 534
Homes adopting recom- mended health practices.....	100	10, 284	358	49, 947	3	163	461	60, 394
Homes installing sanitary closets or outhouses.....	37	495	211	4, 876	1	1	249	5, 372
Homes screened.....	40	571	359	7, 264	1	3	400	7, 838
Homes following other methods of controlling flies, mosquitoes, and other insects.....	37	822	298	14, 181	1	3	336	15, 006
Different homes adopting better practices.....	110	9, 849	467	58, 319	5	205	582	68, 373
Beekeeping:								
Adult result demonstrations	225	1, 317	1	3	1	47	227	1, 367
Junior ² demonstrations.....	60	278	1	2	12	76	73	356
Different farms adopting better practices.....	327	5, 055	1	3	8	71	336	5, 129
Miscellaneous agriculture:								
Adult result demonstrations	54	597	-----	-----	4	91	58	688
Junior ² demonstrations.....	43	701	-----	-----	23	1, 232	66	1, 933
Different farms adopting better practices.....	106	3, 916	-----	-----	8	433	114	4, 349
Miscellaneous home economics:								
Adult result demonstrations	1	38	141	6, 357	-----	-----	142	6, 395
Junior ² demonstrations.....	4	140	142	12, 285	17	655	163	13, 080
Different homes adopting better practices.....	15	587	275	32, 509	14	602	304	33, 698
Total:								
Adult result demonstra- tions.....	-----	318, 570	-----	325, 879	-----	1, 039	-----	645, 488
Junior ² demonstrations.....	-----	146, 327	-----	273, 583	-----	69, 352	-----	489, 262
Instances in which im- proved practices were adopted.....	-----	2, 776, 980	-----	1, 030, 242	-----	36, 559	-----	3, 843, 781

² Boys' and girls' club members.

TABLE 5.—Farmers' institutes conducted by the extension divisions of State agricultural colleges, fiscal year ended June 30, 1924

State	Num-ber of in-stitutes	Total num-ber of days con-ducted	Total num-ber of ses-sions	Total attend-ance	Number of different persons who gave lectures					Amount of State appro-priation used	Amount of other funds used
					From exten-sion staff	From exper-iment sta-tion staff	From State de-part-ment of agri-cul-ture staff	From special force em-ployed for in-stitutes	Total num-ber of lec-turers		
Connecticut.....	32	35	66	1,388	20	-----	-----	7	27	\$1,500.00	-----
Georgia.....	129	129	258	8,377	13	-----	4	12	29	2,250.00	\$801.60
Idaho.....	10	26	78	-----	5	5	-----	-----	10	1,838.49	-----
Indiana.....	463	577	1,209	160,872	8	7	-----	37	52	7,576.32	12,639.68
Iowa.....	123	316	984	148,096	183	-----	4	-----	187	-----	-----
Kansas.....	28	53	89	13,285	14	11	5	5	35	407.80	-----
Minnesota.....	30	31	62	5,004	-----	-----	-----	2	2	7,500.00	-----
Montana.....	96	128	131	8,239	10	-----	6	-----	16	-----	-----
Nebraska.....	83	119	158	3,899	17	1	-----	-----	18	-----	-----
New York.....	106	106	164	6,148	10	-----	-----	16	26	3,917.32	-----
North Dakota.....	124	128	212	37,114	10	3	4	12	29	4,461.92	-----
Ohio.....	639	1,248	2,872	524,400	12	5	-----	79	96	15,935.00	15,400.00
Tennessee.....	4	12	26	4,050	18	9	2	20	49	-----	1,700.00
Utah.....	8	19	61	9,504	9	2	2	3	16	520.00	200.00
Wisconsin.....	325	549	1,202	130,833	73	-----	6	30	109	22,218.90	-----
Wyoming.....	1	3	6	1,500	3	2	-----	-----	5	-----	-----
Total, 1924.....	2,201	3,479	7,578	1,062,709	405	45	33	223	706	68,125.75	30,741.28
1923.....	2,301	3,530	7,836	981,795	275	59	11	160	505	80,661.02	55,449.43
1922.....	2,614	3,580	7,791	1,099,308	340	-----	-----	-----	734	94,575.35	39,730.66
1921.....	2,810	3,844	6,674	745,657	279	-----	-----	-----	556	70,062.59	13,390.92
1920.....	7,154	7,581	27,359	1,795,497	386	-----	-----	-----	728	96,773.88	42,607.76
1919.....	2,625	3,059	6,356	691,763	267	-----	-----	-----	505	88,167.49	23,106.98
1918.....	4,571	4,326	9,640	1,053,082	401	-----	-----	1,178	95,032.28	34,384.49	-----
1917.....	3,958	5,471	11,348	1,389,553	477	-----	-----	-----	966	132,290.55	84,186.46
1916.....	4,707	5,935	12,461	1,504,876	343	-----	-----	-----	952	153,572.22	37,601.55
1915.....	4,552	4,799	9,074	1,039,501	277	-----	-----	-----	2,608	129,811.78	21,062.45

TABLE 6.—Farmers' institutes conducted by the State departments of agriculture, fiscal year ended June 30, 1924

State	Num-ber of in-stitutes	Total num-ber of days con-ducted	Total num-ber of ses-sions	Total attend-ance	Number of different persons who gave lectures					Amount of State appro-priation used	Amount of other funds used
					From ex-ten-sion staff	From exper-iment sta-tion staff	From State de-part-ment of agri-cul-ture staff	From special force em-ployed for in-stitutes	Total num-ber of lec-turers		
Illinois.....	242	385	1,246	165,000	2	35	14	123	174	-----	-----
Iowa.....	73	224	471	74,182	175	-----	2	-----	177	\$4,038.62	-----
Maine.....	425	460	500	25,000	-----	-----	15	10	25	1,500.00	-----
Missouri.....	545	545	545	140,710	3	3	4	5	15	15,000.00	-----
New Hampshire..	14	14	28	1,640	27	18	17	25	87	1,417.67	-----
Rhode Island.....	14	14	19	5,725	8	-----	10	15	33	384.72	-----
Total, 1924.....	1,313	1,642	2,809	412,257	215	56	62	178	511	22,341.01	-----
1923.....	1,618	2,061	3,151	437,298	101	64	46	225	436	59,843.00	\$2,000.00
1922.....	910	1,245	2,674	479,564	238	-----	-----	-----	392	35,127.25	309.80
1921.....	1,866	2,309	3,828	517,182	316	-----	-----	-----	581	174,884.87	9,312.46
1920.....	2,991	3,150	4,651	528,177	412	-----	-----	-----	677	157,888.65	7,112.36
1919.....	1,917	2,622	3,732	576,331	266	-----	-----	-----	540	87,546.60	7,069.91
1918.....	2,370	2,858	4,806	863,624	284	-----	-----	-----	815	89,430.96	41,978.36
1917.....	3,034	3,965	7,504	997,377	253	-----	-----	-----	454	120,006.11	43,588.81
1916.....	4,485	4,851	9,225	1,111,577	419	-----	-----	-----	644	127,459.87	51,786.72
1915.....	4,508	5,791	12,167	1,785,215	259	-----	-----	-----	516	208,175.56	44,026.61

TABLE 7.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1924, by items of expense
EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (FEDERAL SMITH-LEVER)

State	Total ap- propriation	Personal services— salaries and labor	Supplies and material	Communi- cation service	Travel expenses	Transpor- tation of things	Printing, binding, and publications	Heat, light, water, and power	Equip- ment	Miscel- laneous	Unex- pended balance
Alabama.....	\$203,201.83	\$160,333.17	\$4,137.03	\$2,597.79	\$31,864.71	\$256.10	\$1,705.49	\$40.52	\$2,216.27	\$50.75	-----
Arizona.....	32,761.23	27,078.03	1,283.84	476.70	3,396.91	31.26	-----	-----	494.49	-----	-----
Arkansas.....	163,576.10	79,369.45	3,616.16	2,018.55	70,359.83	425.74	4,494.13	-----	1,230.76	2,061.48	-----
California.....	125,061.46	100,098.64	3,874.95	328.91	20,306.68	119.03	-----	-----	333.25	-----	-----
Colorado.....	61,101.07	44,061.63	2,731.98	789.93	9,944.03	135.51	3,029.48	-----	390.24	18.27	-----
Connecticut.....	56,680.09	56,680.09	-----	-----	-----	-----	-----	-----	-----	-----	-----
Delaware.....	70,741.56	17,650.00	-----	18.00	2,453.24	4.20	616.12	-----	-----	-----	-----
Florida.....	24,368.33	52,242.11	2,830.66	827.66	14,385.22	83.96	2,375.76	65.68	1,557.28	-----	-----
Georgia.....	237,780.76	187,985.82	5,611.89	1,324.59	33,378.38	96.49	6,948.93	1,500.20	934.46	-----	-----
Idaho.....	42,867.74	31,101.33	417.55	186.26	10,837.78	13.23	252.00	-----	52.69	6.90	-----
Illinois.....	228,495.98	198,938.62	3,334.83	1,428.31	19,660.40	32.57	4,304.04	-----	774.21	23.00	-----
Indiana.....	162,087.09	138,132.92	2,587.56	830.00	17,703.03	-----	2,288.09	-----	545.49	-----	-----
Iowa.....	170,596.43	152,369.21	-----	-----	18,227.22	-----	-----	-----	-----	-----	-----
Kansas.....	130,962.06	104,220.25	5,565.38	1,707.00	16,393.17	-----	1,743.55	-----	1,332.26	.45	-----
Kentucky.....	197,342.23	83,746.61	2,463.31	1,928.14	102,191.77	677.71	1,707.38	3,600.00	656.98	370.33	-----
Louisiana.....	132,963.83	126,004.52	280.81	341.94	6,062.33	24.54	218.60	-----	28.55	2.54	-----
Maine.....	59,217.76	42,233.24	1,476.32	175.84	13,770.81	21.66	1,127.78	-----	412.11	-----	-----
Maryland.....	70,963.51	60,245.07	308.98	217.89	8,579.96	32.41	573.26	1,000.00	5.94	-----	-----
Massachusetts.....	31,234.75	28,605.33	91.13	38.14	2,496.65	-----	-----	-----	3.50	-----	-----
Michigan.....	159,913.95	159,732.58	-----	-----	181.37	-----	-----	-----	-----	-----	-----
Minnesota.....	150,319.33	124,189.41	79.89	150.44	25,841.64	33.85	-----	-----	13.60	10.50	-----
Mississippi.....	172,904.83	139,397.71	3,785.42	1,442.29	26,185.34	195.91	480.12	257.35	826.69	334.00	-----
Missouri.....	200,921.32	167,506.26	3,402.54	731.73	26,761.25	56.92	1,267.95	-----	1,193.67	1.00	-----
Montana.....	49,597.13	47,454.10	-----	-----	172.45	.47	1,970.11	-----	-----	-----	-----
Nebraska.....	103,620.98	103,042.12	324.80	-----	-----	-----	254.06	-----	-----	-----	-----
Nevada.....	16,530.11	15,795.00	431.76	157.72	18.07	21.72	-----	12.09	93.75	-----	-----
New Hampshire.....	27,159.69	20,742.05	831.82	147.00	3,253.03	293.58	1,150.89	300.00	441.32	-----	-----
New Jersey.....	80,773.81	49,116.73	4,615.49	1,166.16	22,695.64	98.86	1,618.43	397.50	1,017.10	47.90	-----
New Mexico.....	41,035.53	31,760.20	67.36	70.18	8,432.30	30.28	663.91	-----	11.30	-----	-----
New York.....	198,634.11	157,597.60	4,583.75	2,133.89	25,525.86	26.40	3,952.96	-----	2,292.68	-----	\$2,520.97
North Carolina.....	227,356.06	171,952.23	3,495.58	1,556.16	47,880.45	260.80	937.34	-----	923.50	350.00	-----
North Dakota.....	68,694.01	54,603.83	2,095.37	563.48	8,205.47	30.36	1,019.56	-----	2,175.70	.24	-----
Ohio.....	228,775.06	185,778.71	5,536.90	1,280.45	22,992.56	238.29	10,594.33	-----	2,317.82	36.00	-----
Oklahoma.....	166,422.88	122,910.66	3,116.46	1,752.51	30,958.04	79.59	4,466.18	-----	1,091.05	1.46	2,046.93
Oregon.....	51,224.89	30,189.79	1,589.47	642.77	14,746.10	72.77	3,494.02	-----	488.47	1.50	-----
Pennsylvania.....	336,987.38	248,000.73	4,487.05	4,316.50	62,278.10	122.78	2,595.20	350.00	845.95	781.57	13,209.50
Rhode Island.....	11,598.82	9,516.92	275.15	9.80	1,340.50	-----	307.50	-----	130.34	-----	18.61
South Carolina.....	156,014.49	114,762.83	5,602.73	1,928.73	30,126.17	326.52	1,289.54	607.28	1,318.19	52.50	-----
South Dakota.....	66,176.30	65,276.41	338.27	317.10	100.55	19.33	27.91	-----	59.53	37.20	-----
Tennessee.....	191,413.63	143,187.00	4,101.93	2,254.86	33,491.64	692.50	5,291.92	75.52	1,112.71	1,205.55	-----
Texas.....	341,015.26	178,601.56	4,535.73	1,815.67	142,561.14	157.92	6,628.26	-----	6,714.98	-----	-----

State	1915	1916	1917	1918	1919	1920 ³	1921 ²	1922	1923	Total, 1924
Utah	34,565.68	29,128.15	408.32	68.51	4,488.63	7.35	376.79	72.23	15.70	
Vermont	35,473.53	26,088.82	986.27	504.81	5,834.95	126.92	351.91	1,218.89	96	
Virginia	181,804.66	161,180.87	7,728.09	1,872.66	8,567.97	501.94		1,562.87	11.25	
Washington	73,868.29	54,571.59	2,280.58	812.42	12,365.81	118.97	2,336.63	1,382.29		
West Virginia	125,015.45	110,000.11	824.88		13,648.84		173.88	317.74	50.00	
Wisconsin	155,779.27	149,765.65					3,414.64			2,598.98
Wyoming	24,399.74	20,819.39	242.10	32.78	3,043.01	14.79	103.65	135.52	8.50	
Total	5,880,000.00	4,583,765.05	106,380.09	40,964.27	983,709.00	5,483.23	86,152.30	38,726.37	5,479.55	20,394.99
	5,880,000.00	4,447,492.44	130,029.94	40,240.02	1,019,854.81	16,097.05	113,901.41	47,247.12	6,944.88	59,183.11
	5,580,000.00	4,265,041.66	106,177.73	40,165.09	935,937.26		107,237.37	40,701.62	7,174.06	69,650.55
	5,079,999.05	3,727,417.45	115,770.50	47,829.09	920,621.97		96,897.63	50,585.69	8,656.26	105,950.55
	4,512,765.63	3,210,273.50	127,097.40	42,254.14	911,947.11		113,311.71	48,695.97	6,149.87	48,421.27
	2,580,000.00	1,660,720.95	134,166.83	43,054.00	496,439.74		105,120.93	91,655.52	5,051.79	41,171.96
	2,080,000.00	1,381,547.05	109,656.02	39,627.12	394,481.91		76,910.28	61,433.27	1,998.07	11,933.71
	1,580,000.00	1,140,061.93	52,587.62	20,041.81	278,867.24		43,927.84	36,881.97	1,346.99	4,945.62
	1,080,000.00	755,165.64	40,863.34	12,154.06	201,084.45		27,867.77	39,404.50	415.34	2,076.27
	480,000.00	329,143.14	15,463.39	5,539.85	96,402.41		8,241.16	19,769.52	228.41	5,065.27

¹ Prior to 1923, transportation of things included in communication service

²² South Carolina failed to meet the full allotment to that State by \$0.95.

³ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 8.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1924, by items of expense
EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (STATE SMITH-LEVER)

State	Total appro- priation	Personal services— salaries and labor	Supplies and materials	Communi- cation service	Travel expenses	Trans- portation of things	Printing and cuts for publica- tions	Heat, light, and water, and power	Equip- ment	Miscel- laneous	Unex- pended balance
Alabama.....	\$193,201.83	\$174,390.31	\$253.18	\$243.56	\$18,099.27	\$25.08	-----	\$1.44	\$177.74	\$11.25	-----
Arizona.....	22,761.23	18,891.80	190.48	37.54	2,637.45	70.31	\$828.60	-----	100.05	5.00	-----
Arkansas.....	153,576.10	150,820.63	488.72	53.22	17.24	26.68	-----	-----	241.80	1,927.81	-----
California.....	115,061.46	115,061.46	-----	-----	-----	-----	-----	-----	-----	-----	-----
Colorado.....	51,101.07	39,229.23	2,228.11	380.97	6,757.08	105.20	1,683.85	-----	695.67	20.96	-----
Connecticut.....	46,680.09	28,576.03	-----	131.89	17,472.17	-----	-----	500.00	-----	-----	-----
Delaware.....	10,741.56	4,036.18	1,201.55	744.95	4,078.64	13.29	468.25	-----	198.70	-----	-----
Florida.....	64,368.33	51,093.41	815.23	551.76	10,901.00	45.11	-----	-----	947.79	14.03	-----
Georgia.....	227,780.76	219,935.90	97.67	9.40	7,723.67	9.92	-----	-----	4.20	-----	-----
Idaho.....	32,867.74	26,219.72	996.25	540.36	4,657.02	3.03	420.40	-----	26.96	4.00	-----
Illinois.....	218,495.98	218,495.98	-----	-----	-----	-----	-----	-----	-----	-----	-----
Indiana.....	152,087.09	152,087.09	-----	-----	-----	-----	-----	-----	-----	-----	-----
Iowa.....	160,596.43	160,596.43	-----	-----	-----	-----	-----	-----	-----	-----	-----
Kansas.....	120,962.06	103,260.17	1,018.18	140.00	16,298.54	.75	-----	-----	230.67	13.75	-----
Kentucky.....	187,342.23	187,342.23	-----	-----	-----	-----	-----	-----	-----	-----	-----
Louisiana.....	122,963.83	85,423.55	2,384.89	1,647.45	29,968.84	357.37	616.00	400.00	2,164.85	.88	-----
Maine.....	49,217.76	26,195.91	2,121.55	255.79	18,581.52	110.81	-----	-----	1,950.68	1.50	-----
Maryland.....	60,963.51	49,887.56	471.51	419.67	7,957.20	34.57	1,984.47	-----	207.03	1.50	-----
Massachusetts.....	21,234.75	21,234.75	-----	-----	-----	-----	-----	-----	-----	-----	-----
Michigan.....	149,913.95	140,924.34	-----	-----	8,989.61	-----	-----	-----	-----	-----	-----
Minnesota.....	140,319.33	139,503.84	-----	3.70	811.79	-----	-----	-----	-----	-----	-----
Mississippi.....	162,904.83	151,722.07	505.34	335.52	7,251.07	33.82	2,822.67	-----	100.00	134.34	-----
Missouri.....	190,921.32	136,480.78	2,982.66	1,030.04	45,240.45	415.25	3,091.19	-----	1,680.15	.80	-----
Montana.....	39,597.13	31,920.14	2,394.29	85.78	5,141.97	12.19	-----	-----	42.76	-----	-----
Nebraska.....	93,620.98	73,869.07	2,699.38	767.97	14,781.02	30.00	487.87	-----	973.27	12.40	-----
Nevada.....	6,530.11	2,106.50	341.77	274.57	3,318.69	35.16	-----	17.31	436.11	-----	-----
New Hampshire.....	17,159.69	14,621.25	182.50	216.53	1,455.02	24.84	603.90	-----	55.65	-----	-----
New Jersey.....	70,773.81	68,931.51	-----	69.41	-----	-----	1,772.89	-----	-----	-----	-----
New Mexico.....	31,035.53	19,284.99	1,247.82	631.23	6,902.88	292.96	1,492.47	20.23	1,137.95	25.00	\$2,520.97
New York.....	188,634.11	186,113.14	2,107.84	1,098.51	21,825.59	53.48	6,667.74	-----	474.09	5.33	-----
North Carolina.....	217,356.06	185,123.48	397.91	749.77	7,301.41	27.66	849.79	2,665.50	3.60	3.75	-----
North Dakota.....	58,694.01	46,754.62	902.98	211.55	38,073.97	-----	-----	-----	292.25	-----	-----
Ohio.....	218,775.06	179,294.31	1,725.04	738.77	5,735.39	20.70	158.00	-----	276.83	2.50	2,046.93
Oklahoma.....	156,422.88	145,718.72	-----	-----	-----	-----	-----	-----	-----	-----	-----
Oregon.....	41,224.89	41,224.89	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pennsylvania.....	326,987.38	209,825.24	4,198.42	10,643.73	80,407.36	288.14	540.75	1,383.63	835.48	5,655.13	13,209.50
Rhode Island.....	1,598.82	169.20	597.46	152.21	353.54	18.58	124.50	-----	144.02	20.70	18.61
South Carolina.....	146,014.49	120,177.89	819.52	1,256.59	14,005.30	596.99	5,634.45	-----	332.17	3,191.58	-----
South Dakota.....	56,176.30	25,248.70	4,893.48	2,137.77	20,185.34	1,177.51	1,680.25	6.30	815.16	31.79	-----
Tennessee.....	181,413.63	173,672.09	927.48	123.11	2,008.68	40.20	3,451.84	1,076.20	10.00	104.03	-----
-----	331,015.26	308,215.26	-----	-----	22,800.00	-----	-----	-----	-----	-----	-----

Utah.....	24,565.68	23,086.10	432.64	100.20	932.64	.50			12.10	1.50	
Vermont.....	25,473.53	22,982.33	931.53	19.29	1,289.31	2.72			248.35		
Virginia.....	171,804.66	104,248.81		453.78	54,504.15						
Washington.....	63,868.29	42,057.89	2,976.15	618.01	12,807.03	439.28	12,597.92		1,179.62		
West Virginia.....	115,015.45	100,869.66	70.95		11,135.88		3,785.31		626.82		
Wisconsin.....	145,779.27	95,693.18	2,511.17	2,337.97	35,941.69	97.46	2,312.14		585.25	30.87	2,598.98
Wyoming.....	14,399.74	14,399.74					5,982.70				
Total, 1924.....	5,400,000.00	4,637,018.08	46,053.65	29,212.57	568,349.42	4,409.56	60,057.95	6,075.61	17,207.77	11,220.40	20,394.99
1923.....	5,400,000.00	4,655,864.27	49,671.43	25,956.13	520,258.46	14,257.77	51,890.13	4,827.45	22,819.11	5,272.14	59,183.11
1922.....	5,100,000.00	4,254,787.62	49,834.16	27,459.91	587,035.78		74,254.76	5,105.09	24,684.34	7,187.79	69,650.55
1921 ¹	4,599,999.05	3,850,788.52	40,298.04	16,461.40	484,159.39		76,823.58	3,104.69	21,019.47	1,393.41	105,950.55
1920 ²	4,032,765.63	3,382,628.44	46,471.18	26,754.12	440,221.83		58,956.38	3,357.21	18,452.15	7,503.05	48,421.27
1919.....	2,100,000.00	1,484,785.07	77,990.43	28,237.75	369,769.41		55,540.79	2,824.06	33,157.82	6,522.71	41,171.96
1918.....	1,600,000.00	1,189,520.31	46,437.58	20,826.08	259,998.19		40,130.89	3,052.65	24,613.74	3,486.85	11,933.71
1917.....	1,100,000.00	825,004.97	32,507.55	12,441.66	171,145.06		34,822.25	232.44	17,015.59	1,884.86	4,945.62
1916.....	600,000.00	455,471.00	21,505.74	5,397.94	87,038.02		15,198.34	223.28	11,758.17	1,331.24	2,076.27

¹ Prior to 1923, transportation of things included in communication service.

² South Carolina failed to meet the full allotment to that State by \$0.95.

³ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 9.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1924, by projects
EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (FEDERAL SMITH-LEVER)

State	Total appropriation	Administration	Printing and distribution of publications	County agent work	Home demonstration work ¹	Boys' and girls' club work	Home economics specialists ²	Extension schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy
Alabama	\$203,201.83	\$9,877.43	\$1,709.41	\$96,974.92	\$53,154.07	\$1,597.01	\$1,924.62	\$2,240.70	\$4,849.66	---	---	---	\$5,373.77
Arizona	32,761.23	11,409.71	---	14,633.77	265.48	---	---	---	3,910.89	---	---	---	573.76
Arkansas	163,576.10	16,858.10	4,494.13	72,756.97	45,900.30	---	7,347.08	661.89	1,218.18	2,764.60	\$3,515.40	---	---
California	125,061.46	6,487.67	---	47,722.28	63,893.17	4,902.27	---	---	---	---	---	---	---
Colorado	61,101.07	10,475.91	3,401.89	18,873.65	4,004.09	7,253.86	4,823.13	---	3,018.30	2,694.80	---	---	2,584.51
Connecticut	56,680.09	8,419.16	---	5,480.40	5,063.23	3,961.99	9,362.39	---	---	6,228.38	3,991.67	---	2,761.10
Delaware	20,741.56	2,300.00	---	9,814.07	1,900.00	5,168.37	---	---	---	---	---	---	700.00
Florida	74,368.33	13,273.84	634.12	38,152.23	2,981.87	4,791.05	760.60	285.20	5,453.49	---	4,708.66	---	---
Georgia	237,780.76	5,958.66	2,696.32	124,411.51	65,212.20	9,569.96	---	---	---	5,999.01	153.18	\$250.00	9,199.70
Illinois	42,867.74	3,771.26	6,986.93	11,527.60	9,170.96	6,194.05	1,386.99	---	4,035.00	---	1,713.97	---	2,468.02
Indiana	228,495.98	13,698.73	252.00	104,250.84	35,642.74	10,025.45	20,628.38	---	5,763.12	2,240.02	6,343.76	2,164.66	9,061.00
Iowa	162,087.09	15,179.94	4,310.22	47,800.01	5,051.32	16,912.10	10,471.06	2,986.34	11,347.62	11,041.11	11,823.72	---	8,483.39
Kansas	170,596.43	7,350.00	2,288.09	76,400.43	15,800.00	15,221.00	31,650.00	---	---	---	7,450.00	---	---
Kentucky	130,962.06	15,236.17	5,259.93	70,365.92	14,646.30	8,296.27	1,866.76	4,114.71	1,340.19	408.40	379.81	189.90	864.11
Louisiana	197,342.23	7,565.02	3,645.91	115,375.51	21,161.86	10,720.36	5,728.19	1,871.63	4,334.20	4,074.94	2,599.75	3,662.16	3,327.65
Maine	132,963.83	13,675.27	218.60	71,978.33	35,032.87	6,515.23	2,664.06	---	440.06	821.84	532.61	125.46	217.82
Maryland	59,217.76	5,499.78	1,127.78	26,495.38	25,894.82	---	---	---	---	---	---	---	---
Massachusetts	70,963.51	9,778.89	590.21	36,816.26	12,220.91	1,989.41	---	---	731.55	320.86	1,077.72	---	837.14
Michigan	31,234.75	544.11	430.00	6,643.50	1,447.65	6,677.57	1,753.07	---	1,572.66	2,109.69	13.79	---	2,096.39
Minnesota	159,913.95	3,400.00	123.60	83,981.00	14,760.31	22,414.12	5,902.70	---	900.00	775.00	7,468.55	---	9,530.45
Mississippi	150,319.33	11,632.51	---	55,557.39	6,555.57	20,269.40	10,741.34	---	8,502.20	7,319.38	15,520.72	2,940.86	2,175.63
Missouri	172,904.83	18,187.44	480.12	63,259.15	31,995.41	19,075.65	7,479.34	---	---	---	12,454.99	---	---
Montana	200,921.32	12,678.65	2,635.60	87,566.01	12,654.42	7,186.44	24,429.69	---	7,645.39	4,964.31	8,723.10	---	18,828.23
Nebraska	49,597.13	6,072.45	1,970.58	23,758.30	7,280.84	7,003.30	966.66	---	---	---	---	---	---
Nevada	103,620.98	6,182.12	254.06	49,345.00	5,660.00	6,945.00	10,315.00	---	3,705.89	2,325.00	2,220.00	---	4,609.45
New Hampshire	16,530.11	6,718.05	---	5,932.06	2,060.00	---	---	---	---	600.00	1,220.00	---	---
New Jersey	27,159.69	1,900.12	1,150.89	4,131.04	7,373.33	8,938.29	---	---	---	---	---	---	---
New Mexico	80,773.81	15,451.05	2,262.31	22,027.13	11,734.68	9,379.84	3,766.74	---	---	4,797.03	2,220.05	---	1,076.76
New York	41,035.53	12,690.20	663.91	22,107.79	5,573.63	---	---	---	---	---	---	---	---
North Carolina	198,634.11	8,435.77	3,952.96	42,431.56	35,066.65	22,978.47	31,124.76	12,822.20	6,010.84	3,746.70	1,060.01	---	6,812.16
North Dakota	227,356.06	17,571.33	4,999.74	194,876.67	---	---	---	---	---	---	---	---	---
Ohio	68,694.01	10,231.95	1,619.56	27,821.36	3,491.34	1,342.75	15,344.45	---	---	16.63	859.50	559.20	---
Oklahoma	228,775.06	23,315.73	11,731.59	87,302.25	15,955.77	17,636.69	15,187.58	---	6,242.45	5,147.38	1,549.92	---	14,670.22
Oregon	166,422.88	10,929.93	5,021.18	70,889.25	52,584.91	4,807.88	2,996.03	---	1,823.59	3,386.28	2,233.65	---	1,857.12
Pennsylvania	51,224.89	9,695.83	3,611.59	6,036.99	2,652.42	7,648.54	1,155.31	---	2,259.72	2,397.42	1,661.46	---	4,241.12
Rhode Island	336,957.38	47,854.19	2,596.69	94,119.19	---	526.65	76,808.21	---	1,520.39	18,632.84	2,438.73	---	23,701.35
South Carolina	11,598.82	2,629.07	307.50	2,246.67	2,850.62	2,789.63	---	---	---	---	---	---	---
South Dakota	156,014.49	28,777.61	1,289.54	26,363.73	28,272.32	6,725.40	6,320.96	---	8,692.74	5,713.08	10,312.86	---	13,900.69
South Dakota	66,176.30	902.33	27.91	15,606.09	8,366.64	1,800.00	8,146.16	---	6,000.00	3,102.98	3,300.00	3,300.00	6,300.00

Tennessee-----	191,413.63	8,272.00	5,291.92	80,597.11	39,773.05	3,897.71	8,991.63	615.94	12,078.42	1,296.40	7,819.39	-----	8,179.68
Texas-----	341,015.26	40,725.98	7,095.81	164,331.48	79,789.61	6,075.00	9,640.80	-----	5,832.95	3,960.44	3,673.12	-----	3,718.57
Utah-----	34,565.68	4,179.90	419.47	18,255.45	4,115.84	-----	4,174.38	-----	700.04	556.46	664.14	-----	999.96
Vermont-----	35,473.53	6,431.08	351.91	8,864.42	4,652.91	7,075.46	1,384.00	-----	-----	296.83	1,864.99	-----	1,961.86
Virginia-----	181,804.66	32,097.61	-----	100,116.70	41,237.93	8,352.42	-----	-----	-----	-----	-----	-----	-----
Washington---	73,868.29	15,092.53	2,480.38	34,027.55	6,958.26	3,886.09	2,234.43	-----	1,180.15	1,336.01	1,297.40	-----	1,192.99
West Virginia--	125,015.45	2,451.95	936.42	54,788.24	28,059.88	21,589.26	-----	-----	5,575.83	824.97	277.52	-----	3,926.74
Wisconsin-----	155,779.27	13,945.00	8,005.92	51,173.94	4,911.67	6,585.00	14,500.00	-----	5,330.00	4,000.00	9,415.10	-----	15,381.83
Wyoming-----	24,399.74	11,486.99	103.65	5,661.10	2,520.00	2,308.00	920.00	-----	700.00	-----	-----	-----	700.00
Total, 1924--	5,880,000.00	567,299.02	107,430.35	2,499,648.20	885,351.85	347,032.94	362,896.50	25,595.61	127,715.52	115,383.23	146,225.26	15,058.10	192,313.17
1923--	5,880,000.00	560,818.85	134,982.11	2,484,671.37	885,893.81	388,141.33	321,699.57	27,557.00	135,853.68	112,673.45	149,978.94	13,828.80	178,711.34
1922--	5,580,000.00	534,939.13	107,237.37	2,585,672.90	690,124.03	367,674.18	223,457.69	24,013.74	151,306.74	104,173.38	149,102.80	15,052.24	155,850.69
1921 ¹ --	5,079,999.05	510,671.70	96,897.63	2,314,067.79	643,712.65	338,121.77	163,028.85	29,275.33	117,477.14	83,263.80	151,544.79	14,183.78	124,471.96
1920 ⁴ --	4,512,765.63	497,185.75	113,328.01	1,980,498.67	643,380.58	319,561.57	169,269.04	35,041.37	87,871.04	67,003.77	102,469.90	12,947.38	97,415.30
1919--	2,580,000.00	497,041.99	105,120.93	655,145.98	395,631.98	143,219.87	-----	46,439.03	93,866.43	59,589.20	85,229.65	14,524.65	101,141.49
1918--	2,080,000.00	390,545.48	76,910.28	584,815.72	356,475.39	112,076.34	-----	44,515.12	68,268.80	40,519.09	67,341.75	14,790.71	75,316.76
1917--	1,580,000.00	249,738.80	43,881.48	453,417.17	261,229.14	105,290.22	-----	69,425.12	59,018.49	26,507.94	49,536.76	11,807.83	56,668.96
1916--	1,080,000.00	177,213.30	27,867.77	289,708.77	174,753.22	63,189.11	-----	63,125.80	30,305.43	21,168.07	38,365.08	9,593.93	35,352.22
1915--	480,000.00	86,278.39	8,241.16	128,083.33	69,890.05	32,944.29	-----	33,821.65	8,640.84	5,735.83	16,269.72	3,930.67	9,191.99

¹ Prior to 1920, included home-economics specialists.
² Prior to 1920 included under home demonstration work.
³ South Carolina failed to meet the full allotment to that State by \$0.95.
⁴ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 9.—*Expenditures for cooperative agricultural extension work for the year ended June 30, 1924, by projects—Continued*

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (FEDERAL SMITH-LEVER)—Continued

State	Horticulture	Botany and plant pathology	Entomology	Rodent pests	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Publicity	Miscellaneous specialists	Unexpended balance
Alabama	\$4,359.02	\$61.18	\$273.67			\$7,630.01	\$783.36		\$7,320.26	\$475.47	\$4,597.27		
Arizona	483.18						1,146.94		3,057.50				
Arkansas	2,745.33			\$1,109.68			2,056.07						
California						1,724.49	2,143.67						
Colorado				102.77			1,259.67		3,546.67				
Connecticut	6,470.01		135.42										
Delaware		225.00											
Florida		7,479.16				224.66			239.47	3,145.80			
Georgia	215.59												
Idaho	1,850.00		497.89										
Illinois	6,136.72					3,050.71	5,179.63						
Indiana	8,169.89	6,469.47				1,391.18	2,671.85						
Iowa							8,200.00		8,525.00				
Kansas	445.56	970.45	953.90	1,348.86		1,535.33	2,738.55		3,056.71				
Kentucky	3,069.96					5,652.15	1,496.23		145.96				
Louisiana	375.06		220.66										
Maine							200.00						
Maryland	4,434.64	1,021.10	930.31						214.51				
Massachusetts	4,540.16						1,483.79		1,922.37				
Michigan	3,838.87		1,000.00			2,116.36			3,702.99				
Minnesota		3,680.41					2,484.49		2,939.43				
Mississippi						5,497.00			14,475.73				
Missouri	4,796.45		3,204.08			1,587.06			4,021.89				
Montana							2,545.00						
Nebraska	3,000.00					5,409.46	900.00		2,750.00				
Nevada													
New Hampshire													
New Jersey	6,527.83						1,530.39						
New Mexico													
New York	1,535.92	8,321.57	3,527.51		\$842.41	831.85	6,262.40	\$349.40					\$2,520.97
North Carolina	9,908.32												
North Dakota		185.00									1,624.39		
Ohio	6,342.18	766.34				32.58	5,565.30		5,288.15				
Oklahoma	1,852.25		5,469.52			7,845.57	4,323.72		2,205.06				2,046.93
Oregon	2,533.15		1,871.74	150.00		1,767.08			2,977.69	2,055.83			
Pennsylvania	1,198.23	14,851.99	18,430.98		8,342.39	1,965.79	332.03	12,517.95					13,209.50
Rhode Island		565.60					238.10						18.61
South Carolina			4,812.41				191.12		14,833.15				
South Dakota			3,300.00			3,300.00	1,524.19	1,200.00					
Tennessee	351.95							4,183.66	10,067.77				
Texas	5,475.52		2,492.56			2,649.93		5,553.49					
Utah								500.04					

[illegible]

TABLE 10.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1924, by projects.
EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (STATE SMITH-LEVER)

State	Total approp- riation	Adminis- tration	Printing and distri- bution of publica- tions	County agent work	Home demonstra- tion work ¹	Boys' and girls' club work	Home- economics specialists ²	Extension schools	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy
Alabama	\$193,201.83	\$6,605.70	---	\$100,962.79	\$49,533.59	\$7,094.20	\$5,740.63	\$151.00	\$10,632.81	\$375.86	---	---	\$501.74
Arizona	22,761.23	1,066.92	\$828.60	5,350.35	9,125.55	---	---	---	71.29	357.50	\$1,688.94	---	1,450.08
Arkansas	153,576.10	10,455.90	---	79,651.10	50,991.10	---	3,360.00	---	500.00	1,185.00	2,202.00	---	---
California	115,061.46	---	---	96,910.64	---	18,150.82	---	---	---	---	---	---	---
Colorado	51,101.07	4,942.44	2,176.05	26,365.04	1,195.83	3,183.63	4,783.71	---	2,686.53	1,517.15	---	---	1,540.30
Connecticut	46,680.09	6,053.16	1,320.00	---	591.13	6,995.16	5,730.65	---	2,579.63	3,041.85	5,391.81	---	1,322.47
Delaware	10,741.56	3,919.15	503.85	3,118.19	397.41	2,465.17	---	---	---	---	---	---	318.45
Florida	64,368.33	---	---	19,507.36	39,449.16	---	2,703.23	---	---	2,708.58	---	---	---
Georgia	227,780.76	19,577.21	---	128,650.20	36,559.25	4,765.13	5,518.51	---	1,340.00	902.75	8,082.00	\$1,346.67	---
Idaho	32,867.74	3,805.57	420.40	7,583.28	4,630.00	2,703.52	1,827.36	---	5,189.58	---	1,743.57	---	1,954.60
Illinois	218,495.98	---	---	218,495.98	---	---	---	---	---	---	---	---	---
Indiana	152,087.09	---	---	152,087.09	---	---	---	---	---	---	---	---	---
Iowa	160,596.43	---	---	144,028.42	14,284.73	2,283.28	---	---	---	---	---	---	---
Kansas	120,962.06	168.20	---	48,648.44	---	278.54	15,515.32	202.79	10,217.92	6,122.62	5,885.45	2,237.67	12,269.19
Kentucky	187,342.23	14,061.44	712.50	55,975.29	43,620.55	17,644.51	10,124.99	3,300.00	10,426.01	6,606.11	3,316.66	---	6,166.68
Louisiana	122,963.83	17,119.95	616.00	42,742.79	5,972.45	4,709.53	871.32	---	9,267.61	8,372.23	8,082.31	3,517.01	5,763.54
Maine	49,217.76	8,229.32	---	11,848.72	---	5,173.39	5,944.69	---	---	3,534.51	3,382.81	---	3,882.66
Maryland	60,963.51	7,238.93	2,002.92	19,106.90	10,242.80	4,962.32	---	---	2,694.56	2,880.33	2,520.34	---	3,074.16
Massachusetts	21,234.75	---	---	21,234.75	---	---	---	---	---	---	---	---	---
Michigan	149,913.95	11,371.17	---	90,872.05	644.82	1,600.61	687.12	---	2,846.13	4,139.41	5,364.08	---	3,132.77
Minnesota	140,319.33	3,590.47	---	135,864.23	---	---	---	---	---	---	---	864.63	---
Mississippi	162,904.83	---	3,535.10	89,809.64	44,389.49	2,527.81	2,011.25	---	4,467.22	4,670.85	---	---	---
Missouri	190,921.32	7,959.18	4,933.53	109,937.68	18,515.56	3,771.74	14,776.06	620.23	3,822.14	4,177.28	3,943.73	---	9,606.50
Montana	39,597.13	8,500.00	---	15,361.62	800.00	2,800.00	10,200.00	---	---	---	---	---	---
Nebraska	93,620.98	9,757.05	3,274.68	54,880.19	1,631.03	8,718.65	6,227.70	---	1,322.61	2,198.85	666.68	---	1,890.58
Nevada	6,530.11	1,584.69	---	3,110.56	1,326.81	---	---	---	---	103.39	404.66	---	---
New Hampshire	17,159.69	7,624.73	603.90	6,369.85	---	---	---	---	---	---	---	---	---
New Jersey	70,773.81	3,850.00	1,889.11	12,724.81	5,206.73	17,040.02	8,158.34	---	---	4,604.80	3,500.00	---	3,600.00
New Mexico	31,035.53	3,967.62	1,095.85	11,859.66	---	---	2,364.10	---	3,145.01	296.84	---	---	4,185.43
New York	188,634.11	693.69	---	105,656.74	40,910.00	1,576.13	8,987.23	1,689.35	4,650.00	3,000.00	1,500.00	---	1,925.00
North Carolina	217,356.06	---	6,667.74	37,822.19	106,624.83	---	---	---	31,757.48	---	---	---	15,245.26
North Dakota	58,694.01	3,348.70	849.79	19,375.58	4,133.00	4,944.39	1,461.46	---	4,401.20	4,090.33	4,339.81	3,914.05	---
Ohio	218,775.06	13,879.48	---	128,386.17	9,049.56	19,224.05	7,571.91	---	7,718.63	3,771.44	4,083.70	---	13,322.52
Oklahoma	156,422.88	15,873.63	---	77,334.77	24,813.70	8,144.42	3,854.83	---	2,581.19	3,689.45	3,050.19	---	2,211.60
Oregon	41,224.89	3,253.74	1,563.00	15,781.15	1,000.00	3,450.00	2,040.00	---	2,000.00	1,650.00	2,250.00	---	2,300.00
Pennsylvania	326,987.38	8,158.21	548.45	213,013.52	---	15,062.83	2,299.27	---	19,906.52	561.09	27,186.21	---	540.60
Rhode Island	1,598.82	869.81	124.50	136.40	121.87	327.63	---	---	---	---	---	---	---
South Carolina	146,014.49	437.50	6,364.45	85,696.36	37,715.71	369.00	---	---	---	---	---	---	---
South Dakota	56,176.30	24,107.14	1,680.25	7,924.47	---	1,558.46	5,141.61	---	2,068.32	1,404.26	1,497.46	1,719.57	3,369.87

Tennessee	181,413.63	21,066.28	3,451.84	107,392.23	36,195.55	539.22	788.31	3,870.00	1,244.09	2,925.07	1,149.82	910.85
Texas	331,015.26		5,999.80	199,653.55	91,230.74	2,700.00	4,460.00		4,363.47	3,563.46	2,363.47	2,563.46
Utah	24,565.68	3,460.63		15,860.05	4,814.50							
Vermont	25,473.53	2,624.61		9,705.86	5,034.94	3,799.22	34.47			916.80	2,522.54	63.89
Virginia	171,804.66		13,827.92	61,923.05	33,572.63		7,787.75		8,881.74	9,388.22	8,732.05	7,269.36
Washington	63,868.29	7,323.51	4,381.21	5,723.89	3,094.57	5,857.67	7,812.26		2,874.35	2,948.29	5,576.85	2,862.50
West Virginia	115,015.45	13,631.08	5,434.92	60,914.13	8,789.21	6,966.98			7,179.45	6,941.34	3,721.07	993.30
Wisconsin	145,779.27	5,735.08	6,149.36	86,175.38	1,190.64	3,293.29	6,739.56	2,108.01	6,007.50	1,258.65	9,039.17	3,308.93
Wyoming	14,399.74			10,860.00	3,539.74							
Total, 1924	5,400,000.00	285,911.89	81,005.72	2,962,393.16	750,939.18	194,631.32	165,523.64	13,984.83	176,842.99	103,904.31	133,617.88	117,546.29
1923	5,400,000.00	332,631.65	74,414.38	2,940,071.60	831,627.67	193,437.23	104,525.11	5,506.33	150,062.17	100,913.09	115,412.01	115,216.02
1922	5,100,000.00	299,388.81	78,678.18	2,669,702.27	775,682.83	223,517.62	200,301.69	16,517.56	117,689.62	89,407.18	88,359.26	128,143.57
1921 ¹	4,599,999.05	299,526.68	76,823.58	2,348,738.60	761,014.77	215,447.91	94,802.54	22,731.78	104,050.07	77,498.14	74,905.25	100,675.72
1920 ⁴	4,032,765.63	247,554.18	58,956.38	2,204,209.25	589,724.44	178,237.12	117,032.75	47,019.29	84,244.58	61,520.81	50,416.25	14,135.15
1919	2,100,000.00	252,329.45	55,540.79	941,902.93	293,869.64	112,706.23		28,667.68	55,747.75	34,779.81	48,483.73	42,585.94
1918	1,600,000.00	178,212.44	40,130.89	766,416.54	197,262.21	80,315.51		35,850.11	44,274.89	22,973.75	45,155.37	44,613.67
1917	1,100,000.00	97,302.53	34,819.50	541,495.05	126,235.78	50,209.68		36,501.94	27,199.22	12,722.78	24,306.88	26,433.67
1916	600,000.00	90,055.50	15,198.34	283,077.42	68,468.44	23,473.54		25,754.65	7,305.47	7,102.61	9,905.43	9,439.85

State	Horticul- ture	Botany and plant pathology	Ento- mology	Rodent pests	Forestry	Agricul- tural en- gineering	Farm manage- ment	Rural or- ganization	Marketing	Exhibits and fairs	Publicity	Miscel- laneous specialists	Unexpend- ance
Alabama	\$714.69	\$1,851.96	\$2,414.78			\$2,285.48	\$175.00		\$2,791.00		\$1,370.60		
Arizona	2,822.00			\$540.00			600.00		2,501.00				
Arkansas	1,590.00												
California				170.95		1,149.46	710.86		679.12				
Colorado						2,158.03	1,674.43		3,878.62				
Connecticut	3,756.68		2,186.47										
Delaware		19.34											
Florida													
Georgia	9,762.84					5,446.66	645.00		5,184.54				
Idaho	2,311.84		698.02										
Illinois													
Indiana													
Iowa													
Kansas	5,238.84	3,346.61	3,344.73			7,458.52	27.22						
Kentucky	5,225.00						3,686.66		6,475.83				
Louisiana	9,576.78		3,421.80		\$150.00				2,780.51				
Maine					2,876.97		4,344.69						
Maryland	3,985.75	195.41	576.47						1,482.62				
Massachusetts													
Michigan	11,354.51		3,301.28			3,167.51			11,432.49				
Minnesota													
Mississippi	11,493.47												
Missouri	4,673.92		2,237.91			103.37			1,842.49				

¹ Prior to 1920 included home-economics specialists.
⁴ Prior to 1920 included under home demonstration work.
³ South Carolina failed to meet the full allotment to that State by \$0.95.
⁴ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 10.—Expenditures for cooperative agricultural extension work for the year ended June 30, 1924, by projects—Continued

EXPENDITURES FROM THE UNITED STATES APPROPRIATION OF MAY 8, 1914 (STATE SMITH-LEVER)—Continued

State	Horticulture	Botany and plant pathology	Entomology	Rodent pests	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Publicity	Miscellaneous specialists	Unexpended balance
Montana							\$1,935.51						
Nebraska	\$622.61					\$1,376.71			\$1,053.64				
Nevada													
New Hampshire							2,561.21						
New Jersey	7,200.00						3,000.00						
New Mexico	1,516.62												
New York	4,750.00	\$1,800.00	\$2,000.00			2,775.00	4,200.00		2,450.78			\$153.62	\$2,520.97
North Carolina	251.00	3,548.24	6,046.42			5,425.99			3,966.91		\$5,422.41		
North Dakota		1,043.44				409.71	960.14						
Ohio	6,676.67					2,901.75	2,189.18		2,975.60				2,046.93
Oklahoma	2,563.48		2,444.91	\$733.33		2,541.85			2,000.00				
Oregon	2,400.00		730.45		\$315.00	1,650.00	1,450.00	\$261.68					13,209.50
Pennsylvania	14,567.45	691.14					9,935.46						18.61
Rhode Island													
South Carolina	8,776.78	4,258.61						1,458.58	937.50				
South Dakota			964.35			1,579.19	1,166.49	648.14	1,346.72				
Tennessee	687.30					529.49			663.53				
Texas	4,926.92		2,363.46			2,363.46		4,463.47					
Utah													
Vermont	469.53						301.67						
Virginia	11,748.66	3,714.48				4,958.80							
Washington	2,548.06	2,563.67	1,462.11			2,662.50	2,220.37			\$1,913.03			
West Virginia	227.55	137.11											
Wisconsin	2,979.80	1,202.61	778.32			6,512.57	645.24		53.18				2,598.98
Wyoming													
Total, 1924	145,418.75	24,372.62	34,971.48	1,444.28	3,341.97	57,456.05	42,429.13	6,831.87	54,499.08	1,913.03	6,793.01	153.62	20,394.99
1923	127,599.02	16,280.70	43,239.84	2,220.00	2,595.41	65,911.42	39,344.76	6,270.69	59,186.20	3,768.04		7.26	59,183.11
1922	99,493.33	23,688.88	32,150.09	1,627.05	6,857.47	42,101.04	31,293.57	5,296.99	69,367.15	5,758.05		10,078.79	69,650.55
1921	82,432.04	38,993.32	22,121.07	11,119.99	50.00	5,870.22	31,388.27	35,981.24	10,142.62	56,663.33		7,343.09	105,950.55
1920	76,121.70	29,513.14	21,011.90	9,380.74	1,927.09	5,555.87	42,707.86	25,288.52	12,718.94	32,737.92		3,971.01	48,421.27
1919	37,705.66	19,646.78	10,750.04	10,134.00	1,163.59	3,759.50	26,472.85	21,327.94	13,077.73	31,572.65		5,104.36	41,171.96
1918	22,294.37	19,659.97	9,904.89		367.54	1,184.10	20,830.86	13,135.06	13,798.22	20,502.90		3,128.85	11,933.71
1917	18,183.43	18,643.05	7,030.07	12,489.65		3,171.32	12,420.99	15,638.37	12,636.50	9,544.02		2,839.67	4,945.63
1916	9,911.70	5,388.86	3,560.81	3,742.83		1,498.89	3,003.55	6,065.04	12,279.09	1,850.19		3,434.64	2,076.27

TABLE 11.—*Sources of offset to Federal Smith-Lever funds for the fiscal year ended June 30, 1924*

State	Total appropri- ation	State	County	College	Other (farmers' organ- izations, etc.)	Unexpended balance
Alabama.....	\$193,201.83	\$135,833.17	\$57,368.66			
Arizona.....	22,761.23	22,761.23				
Arkansas.....	153,576.10	74,207.44	79,368.66			
California.....	115,061.46	115,061.46				
Colorado.....	51,101.07	37,591.00	13,510.07			
Connecticut.....	46,680.09	46,680.09				
Delaware.....	10,741.56	10,741.56				
Florida.....	64,368.33	48,872.25	15,496.08			
Georgia.....	227,780.76	100,000.00	127,780.76			
Idaho.....	32,867.74	32,867.74				
Illinois.....	218,495.98	110,804.84			\$107,691.14	
Indiana.....	152,087.09	82,458.18	69,628.91			
Iowa.....	160,596.43		160,596.43			
Kansas.....	120,962.06	72,313.62	48,648.44			
Kentucky.....	187,342.23	142,241.30	45,100.93			
Louisiana.....	122,963.83	91,184.95	31,778.88			
Maine.....	49,217.76	48,339.74	878.02			
Maryland.....	60,963.51	60,963.51				
Massachusetts.....	21,234.75	21,234.75				
Michigan.....	149,913.95	59,684.30	90,229.65			
Minnesota.....	140,319.33	84,577.56	51,286.67	\$4,455.10		
Mississippi.....	162,904.83	69,700.00	93,204.83			
Missouri.....	190,921.32	79,158.41	111,762.91			
Montana.....	39,597.13	30,064.49	9,532.64			
Nebraska.....	93,620.98	44,179.30	49,441.68			
Nevada.....	6,530.11	6,530.11				
New Hampshire.....	17,159.69	17,159.69				
New Jersey.....	70,773.81	70,773.81				
New Mexico.....	31,035.53	23,564.01	7,471.52			
New York.....	188,634.11	109,900.00	76,213.14			\$2,520.97
North Carolina.....	217,356.06	159,533.87	57,822.19			
North Dakota.....	58,694.01	57,469.02	1,224.99			
Ohio.....	218,775.06	164,424.07	54,350.99			
Oklahoma.....	156,422.88	118,765.52	35,610.43			2,046.93
Oregon.....	41,224.89	41,224.89				
Pennsylvania.....	326,987.38	219,289.87	94,488.01			13,209.50
Rhode Island.....	1,598.82	1,580.21				18.61
South Carolina.....	146,014.49	104,530.40	41,484.09			
South Dakota.....	56,176.30	56,176.30				
Tennessee.....	181,413.63	60,000.00	110,405.85	11,007.78		
Texas.....	331,015.26	251,326.40	79,688.86			
Utah.....	24,565.68	24,565.68				
Vermont.....	25,473.53	25,473.53				
Virginia.....	171,804.66	158,243.02	13,561.64			
Washington.....	63,868.29	63,868.29				
West Virginia.....	115,015.45	53,535.64	61,479.81			
Wisconsin.....	145,779.27	103,224.49	39,955.80			2,598.98
Wyoming.....	14,399.74	14,399.74				
Total, 1924.....	5,400,000.00	3,527,079.45	1,729,371.54	15,462.88	107,691.14	20,394.99
1923.....	5,400,000.00	3,367,480.10	1,769,973.22	95,565.31	107,798.26	59,183.11
1922.....	5,100,000.00	3,160,939.21	1,712,675.09	57,063.42	99,671.73	69,650.55
1921 ¹	4,599,999.05	2,858,480.54	1,518,778.45	107,981.07	8,808.44	105,950.55
1920 ²	4,032,765.63	2,439,467.52	1,095,923.84	191,287.03	257,665.97	48,421.27
1919.....	2,100,000.00	1,539,300.08	316,367.59	46,766.34	156,394.03	41,171.96
1918.....	1,600,000.00	1,262,305.01	215,077.20	51,025.46	59,658.62	11,933.71
1917.....	1,100,000.00	893,058.99	94,556.74	59,055.32	48,383.33	4,945.62
1916.....	600,000.00	470,649.42	69,226.79	26,834.76	31,212.76	2,076.27

¹ South Carolina failed to meet full allotment to that State by \$0.95.² Pennsylvania failed to meet full allotment to that State by \$67,234.37.

TABLE 12.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for the year ended June 30, 1924, by sources of funds

State	Total	United States Department of Agriculture		Smith-Lever		State and college	County	Other
		Farmers' cooperative demonstration work	Other bureaus	Federal	State			
Alabama-----	\$460,641.27	\$32,996.05	\$1,966.72	\$203,201.83	\$193,201.83	\$15,120.07	\$14,154.77	-----
Arizona-----	123,193.38	11,385.63	17,113.25	32,761.23	22,761.23	18,555.18	20,616.86	-----
Arkansas-----	433,867.87	30,942.97	2,498.77	163,576.10	153,576.10	9,663.30	54,386.82	\$19,223.81
California-----	605,309.80	23,434.20	15,774.78	125,061.46	115,061.46	172,416.90	153,561.00	-----
Colorado-----	215,756.61	23,494.78	14,578.43	61,101.07	51,101.07	12,004.62	52,355.06	1,121.58
Connecticut-----	251,146.75	13,664.13	84.15	56,680.09	46,680.09	35,803.91	98,234.38	-----
Delaware-----	38,123.00	6,639.88	-----	20,741.56	10,741.56	-----	-----	-----
Florida-----	253,573.41	22,052.78	2,632.15	74,368.33	64,368.33	16,200.00	73,951.82	-----
Georgia-----	580,498.59	38,529.13	1,157.94	237,780.76	227,780.76	37,250.00	38,000.00	-----
Idaho-----	183,492.81	20,696.68	17,186.28	42,867.74	32,867.74	16,875.92	51,442.32	1,556.13
Illinois-----	1,026,935.47	632.13	210.00	228,495.98	218,495.98	13,400.00	21,989.22	543,712.16
Indiana-----	498,551.63	12,175.27	435.00	162,087.09	152,087.09	52,255.97	75,350.54	44,160.67
Iowa-----	992,500.33	13,800.82	351.30	170,596.43	160,596.43	221,487.72	141,500.00	284,167.63
Kansas-----	470,532.99	10,740.23	5,637.55	130,962.06	120,962.06	57,983.93	104,555.97	39,691.19
Kentucky-----	463,209.51	31,102.80	1,181.20	197,342.23	187,342.23	-----	37,903.54	8,337.51
Louisiana-----	358,619.16	34,251.68	252.55	132,963.83	122,963.83	2,009.21	61,180.12	4,997.94
Maine-----	160,310.99	18,859.65	-----	59,217.76	49,217.76	653.00	25,788.77	6,574.05
Maryland-----	259,795.15	19,389.35	10.85	70,963.51	60,963.51	64,096.93	44,371.00	-----
Massachusetts-----	408,814.15	25,643.91	-----	31,234.75	21,234.75	78,540.74	252,160.00	-----
Michigan-----	599,360.55	9,060.74	652.40	159,913.95	149,913.95	72,615.51	207,204.00	-----
Minnesota-----	441,307.89	13,646.98	235.00	150,319.33	140,319.33	31,609.66	81,555.21	23,622.38
Mississippi-----	481,479.55	38,712.48	1,799.40	172,904.83	162,904.83	8,017.70	97,140.31	-----
Missouri-----	421,644.08	12,512.22	1,226.25	200,921.32	190,921.32	3,638.07	12,424.90	-----
Montana-----	253,499.16	26,018.15	12,348.52	49,597.13	39,597.13	39,080.87	86,857.36	-----
Nebraska-----	326,603.22	12,954.42	3,386.62	103,620.98	93,620.98	25,556.36	87,463.86	-----
Nevada-----	96,681.06	12,362.53	12,231.25	16,530.11	6,530.11	694.39	48,332.67	-----
New Hampshire-----	128,357.91	18,197.12	-----	27,159.69	17,159.69	10,470.96	39,905.76	15,464.69
New Jersey-----	287,034.98	14,806.04	329.95	80,773.81	70,773.81	-----	120,351.37	-----
New Mexico-----	153,437.70	20,441.01	13,485.80	41,035.53	31,035.53	-----	47,145.17	294.66
New York-----	1,214,341.12	11,118.39	478.15	196,113.14	186,113.14	287,129.71	529,595.58	3,793.01
North Carolina-----	579,848.00	33,279.81	6,877.45	227,356.06	217,356.06	10,642.72	84,335.90	-----
North Dakota-----	244,596.98	27,126.97	5,572.00	68,694.01	58,694.01	1,807.38	82,702.61	-----
Ohio-----	635,688.14	9,838.32	2,865.40	228,775.06	218,775.06	55,672.20	118,478.82	1,283.28
Oklahoma-----	464,007.97	30,502.62	6,304.17	164,375.95	154,375.95	-----	108,449.28	-----
Oregon-----	275,223.39	23,971.94	14,388.24	51,224.89	41,224.89	75,263.57	67,873.79	1,276.07
Pennsylvania-----	658,004.23	70.25	-----	323,777.88	313,777.88	20,378.22	-----	-----
Rhode Island-----	31,838.59	7,722.36	-----	11,580.21	1,580.21	135.81	10,820.00	-----

South Carolina.....	414, 044. 50	32, 401. 05	156, 014. 49	146, 014. 49	7, 000. 00	70, 722. 22	-----
South Dakota.....	333, 828. 75	22, 765. 14	66, 176. 30	56, 176. 30	67, 449. 45	112, 415. 89	-----
Tennessee.....	427, 540. 52	35, 926. 71	191, 413. 63	181, 413. 63	3, 346. 66	5, 968. 19	-----
Texas.....	954, 370. 74	55, 117. 58	341, 015. 26	331, 015. 26	-----	220, 515. 14	-----
Utah.....	143, 649. 09	16, 488. 28	34, 565. 68	24, 565. 68	21, 448. 58	29, 573. 72	1, 307. 40
Vermont.....	122, 521. 92	16, 834. 53	35, 473. 53	25, 473. 53	6, 424. 71	14, 816. 99	23, 256. 13
Virginia.....	525, 443. 09	31, 741. 52	181, 804. 66	171, 804. 66	56, 220. 34	71, 106. 90	12, 460. 91
Washington.....	253, 634. 49	25, 142. 13	73, 868. 29	63, 868. 29	4, 365. 55	74, 794. 14	228. 79
West Virginia.....	301, 808. 55	18, 131. 17	125, 015. 45	115, 015. 45	25, 523. 01	17, 974. 49	-----
Wisconsin.....	385, 758. 75	7, 640. 62	153, 180. 29	143, 180. 29	97. 02	78, 047. 18	-----
Wyoming.....	141, 597. 25	16, 937. 67	24, 399. 74	14, 399. 74	37, 972. 36	35, 111. 38	-----
Total, 1924.....	19, 082, 025. 04	991, 900. 82	5, 859, 605. 01	5, 379, 605. 01	1, 696, 878. 21	3, 883, 185. 02	1, 036, 529. 99
1923.....	18, 484, 845. 00	1, 004, 729. 29	5, 820, 816. 89	5, 340, 816. 89	1, 712, 766. 53	3, 420, 000. 81	910, 182. 35
1922.....	17, 181, 751. 64	1, 007, 263. 48	5, 510, 349. 45	5, 030, 349. 45	1, 497, 379. 71	2, 972, 740. 71	954, 127. 91
1921.....	16, 792, 248. 32	1, 025, 083. 33	4, 974, 048. 50	4, 494, 048. 50	1, 549, 897. 30	3, 293, 566. 38	1, 020, 557. 61
1920.....	14, 658, 079. 92	1, 021, 091. 39	4, 464, 344. 36	3, 984, 344. 36	1, 244, 465. 72	2, 865, 739. 87	672, 073. 26
1919.....	14, 661, 560. 50	1 5, 564, 839. 70	2, 538, 828. 04	2, 058, 828. 04	901, 828. 49	2, 291, 209. 30	370, 653. 29
1918.....	11, 302, 764. 75	2 3, 900, 406. 30	2, 068, 066. 29	1, 588, 066. 29	881, 091. 25	1, 863, 632. 29	494, 219. 38
1917.....	6, 149, 619. 63	958, 333. 87	1, 575, 054. 38	1, 095, 054. 38	832, 114. 16	1, 258, 296. 14	244, 873. 55
1916.....	4, 864, 180. 94	900, 389. 92	1, 077, 923. 73	597, 923. 73	872, 733. 90	973, 251. 56	276, 786. 09
1915.....	3, 597, 235. 85	905, 782. 00	474, 934. 73	-----	1, 044, 270. 38	780, 331. 79	286, 748. 55

1 Includes \$4,598,243.13 emergency funds.

:Includes \$2,949,072.48 emergency funds.

TABLE 13.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for the year ended June 30, 1924, by items of expense

State	Total	Personal serv- ice—salaries and labor	Supplies and materials	Communica- tion service	Travel ex- penses	Transporta- tion of things.	Publications	Heat, light, water, and power	Equipment	Miscellane- ous
Alabama.....	\$460, 641. 27	\$398, 562. 29	\$4, 521. 71	\$2, 841. 35	\$50, 160. 90	\$351. 56	\$1, 705. 49	\$41. 96	\$2, 394. 01	\$62. 00
Arizona.....	123, 193. 38	76, 185. 68	3, 766. 69	1, 140. 64	37, 621. 44	185. 43	828. 60	37. 06	1, 458. 34	1, 969. 50
Arkansas.....	433, 867. 87	343, 793. 40	4, 262. 88	2, 071. 77	72, 294. 86	520. 34	5, 462. 77	-----	1, 472. 56	3, 989. 29
California.....	605, 309. 80	452, 632. 34	18, 837. 56	8, 402. 54	108, 839. 72	517. 83	1, 199. 14	891. 32	5, 360. 24	8, 629. 11
Colorado.....	215, 756. 61	136, 539. 61	7, 190. 85	1, 640. 25	59, 910. 89	443. 55	7, 096. 62	8. 20	1, 423. 54	1, 503. 10
Connecticut.....	251, 146. 75	159, 721. 37	12, 132. 90	4, 678. 71	51, 575. 20	1, 615. 42	4, 359. 14	2, 910. 53	1, 874. 69	13, 278. 79
Delaware.....	38, 123. 00	28, 312. 84	1, 201. 55	762. 95	6, 531. 88	30. 71	1, 084. 37	-----	198. 70	-----
Florida.....	253, 573. 41	214, 319. 71	4, 516. 12	1, 586. 05	26, 316. 33	210. 73	2, 375. 76	65. 68	2, 846. 79	1, 336. 24
Georgia.....	580, 498. 59	484, 574. 61	6, 129. 50	1, 333. 99	41, 613. 11	209. 59	6, 948. 93	1, 500. 20	938. 66	37, 250. 00
Idaho.....	183, 492. 81	127, 638. 17	4, 706. 45	3, 047. 11	44, 638. 73	288. 80	6, 978. 85	85. 89	691. 74	1, 698. 07
Illinois.....	1, 026, 935. 47	640, 448. 38	360, 101. 09	1, 428. 31	19, 720. 40	136. 04	4, 304. 04	-----	774. 21	23. 00
Indiana.....	498, 551. 63	377, 705. 85	25, 707. 22	5, 845. 64	75, 753. 06	716. 73	7, 018. 91	181. 33	2, 547. 69	3, 075. 20
Iowa.....	992, 500. 33	644, 833. 30	43, 360. 84	40, 503. 22	138, 241. 84	3, 467. 67	44, 434. 35	4, 232. 72	19, 395. 87	54, 030. 52
Kansas.....	470, 532. 99	319, 686. 94	16, 873. 21	10, 424. 65	70, 083. 03	1, 193. 33	5, 181. 75	565. 75	14, 439. 19	32, 085. 14
Kentucky.....	463, 209. 51	340, 717. 93	3, 333. 59	2, 002. 27	109, 110. 30	730. 64	2, 054. 27	3, 600. 00	1, 242. 43	418. 08
Louisiana.....	358, 619. 16	307, 673. 34	3, 134. 60	2, 103. 35	38, 234. 93	511. 49	4, 364. 63	400. 00	2, 193. 40	3. 42
Maine.....	160, 310. 99	109, 866. 67	6, 944. 44	2, 769. 21	33, 025. 58	329. 08	1, 161. 77	-----	4, 040. 16	2, 174. 08
Maryland.....	259, 795. 15	194, 713. 69	8, 527. 69	1, 367. 67	48, 042. 10	1, 080. 57	2, 960. 28	1, 000. 00	1, 970. 26	132. 89
Massachusetts.....	408, 814. 15	271, 527. 21	6, 471. 37	4, 000. 56	121, 397. 32	437. 61	2, 469. 22	22. 81	1, 971. 09	516. 96
Michigan.....	599, 360. 55	371, 737. 08	5, 075. 70	2, 132. 09	209, 191. 29	302. 17	4, 147. 88	-----	1, 497. 49	5, 276. 85
Minnesota.....	441, 307. 89	319, 469. 48	10, 075. 15	8, 378. 11	87, 138. 07	669. 23	9, 860. 85	196. 64	2, 860. 98	2, 659. 38
Mississippi.....	481, 479. 55	431, 003. 12	5, 414. 35	2, 323. 31	36, 665. 82	358. 46	3, 786. 79	511. 10	948. 26	468. 34
Missouri.....	421, 644. 08	319, 429. 39	11, 017. 71	6, 448. 39	74, 256. 35	620. 33	4, 545. 87	389. 96	3, 030. 61	1, 905. 47
Montana.....	253, 499. 16	178, 143. 96	6, 404. 04	1, 019. 64	63, 504. 04	417. 17	1, 970. 11	1, 000. 00	1, 040. 20	-----
Nebraska.....	326, 603. 22	244, 797. 39	12, 259. 45	7, 591. 48	50, 868. 53	421. 80	1, 147. 17	-----	4, 638. 40	4, 879. 00
Nevada.....	96, 681. 06	60, 700. 68	2, 813. 83	1, 578. 38	27, 231. 94	325. 03	-----	136. 77	1, 901. 73	1, 992. 70
New Hampshire.....	128, 357. 91	83, 895. 11	3, 630. 13	2, 203. 23	25, 544. 08	464. 75	5, 606. 09	1, 395. 83	2, 052. 06	3, 566. 63
New Jersey.....	287, 034. 98	203, 804. 41	10, 379. 69	4, 631. 11	57, 479. 12	332. 43	3, 466. 32	482. 99	3, 581. 05	2, 877. 86
New Mexico.....	153, 437. 70	99, 624. 20	2, 589. 87	1, 960. 74	43, 461. 51	623. 59	2, 160. 38	36. 22	2, 253. 81	2, 727. 38
New York.....	1, 214, 341. 12	683, 131. 95	53, 819. 97	36, 369. 62	140, 367. 39	1, 575. 78	98, 495. 52	35, 968. 29	50, 201. 65	114, 410. 95
North Carolina.....	579, 848. 00	487, 131. 31	6, 405. 88	2, 693. 69	73, 359. 54	422. 30	8, 019. 32	-----	1, 460. 25	355. 71
North Dakota.....	244, 596. 98	167, 608. 19	3, 390. 93	1, 393. 27	65, 166. 42	216. 98	1, 906. 84	2, 665. 50	2, 209. 86	38. 99
Ohio.....	635, 688. 14	489, 551. 09	13, 107. 52	4, 194. 34	112, 832. 92	246. 49	12, 112. 64	-----	3, 380. 64	262. 50
Oklahoma.....	464, 007. 97	411, 176. 85	5, 099. 56	2, 491. 28	39, 053. 21	191. 05	4, 624. 18	-----	1, 367. 88	3. 96
Oregon.....	275, 223. 39	196, 405. 10	5, 237. 39	5, 467. 13	57, 275. 95	568. 00	3, 161. 95	71. 28	1, 547. 28	1, 646. 69
Pennsylvania.....	658, 004. 23	474, 388. 08	10, 623. 40	15, 750. 16	143, 575. 74	420. 43	3, 161. 95	1, 733. 63	1, 964. 14	6, 436. 70
Rhode Island.....	31, 838. 59	25, 705. 42	975. 90	582. 01	3, 749. 32	28. 35	432. 00	-----	275. 52	90. 07
South Carolina.....	414, 044. 50	345, 447. 26	6, 919. 05	3, 185. 32	45, 050. 92	1, 016. 24	6, 923. 99	607. 28	1, 650. 36	3, 244. 68
South Dakota.....	333, 828. 75	236, 795. 67	10, 321. 80	7, 823. 23	71, 823. 66	1, 580. 82	2, 347. 06	233. 18	983. 64	1, 919. 69
Tennessee.....	427, 540. 52	365, 123. 88	6, 206. 72	2, 404. 74	40, 086. 51	1, 000. 19	8, 743. 76	1, 151. 72	1, 431. 54	1, 391. 46
Texas.....	954, 370. 74	765, 401. 51	5, 096. 74	1, 815. 67	168, 239. 02	474. 56	6, 628. 26	-----	6, 714. 98	-----
Utah.....	143, 649. 09	93, 667. 05	2, 728. 22	476. 29	45, 346. 87	74. 03	376. 79	-----	195. 84	784. 00

Vermont.....	122, 521. 92	84, 313. 32	3, 610. 03	1, 988. 66	17, 825. 33	209. 92	6, 255. 78	360. 00	3, 186. 15	4, 772. 72
Virginia.....	525, 443. 09	389, 592. 31	8, 717. 53	2, 326. 44	72, 332. 25	575. 30	12, 897. 92	384. 51	2, 722. 78	35, 897. 05
Washington.....	253, 634. 49	180, 386. 99	9, 676. 32	3, 868. 30	46, 889. 38	641. 74	6, 639. 00	286. 77	5, 245. 99	-----
West Virginia.....	301, 808. 55	259, 697. 04	4, 051. 60	1, 812. 15	30, 345. 70	220. 87	4, 023. 01	-----	1, 557. 08	101. 10
Wisconsin.....	385, 758. 75	264, 745. 29	2, 589. 01	2, 337. 97	105, 864. 69	111. 31	9, 494. 36	-----	585. 25	30. 87
Wyoming.....	141, 597. 25	97, 747. 95	1, 353. 31	507. 71	40, 074. 15	129. 38	1, 550. 22	-----	193. 38	41. 15
Total, 1924.....	19, 082, 025. 04	13, 960, 024. 41	771, 311. 06	233, 704. 70	3, 147, 711. 34	27, 215. 82	344, 036. 52	63, 155. 12	176, 912. 37	357, 953. 70
1923.....	18, 484, 845. 00	13, 669, 713. 39	477, 957. 00	194, 642. 98	3, 031, 252. 99	1 25, 567. 34	336, 906. 94	54, 900. 21	148, 038. 07	545, 861. 12
1922.....	17, 181, 751. 64	12, 740, 999. 28	410, 592. 62	186, 562. 01	2, 765, 227. 90	-----	395, 859. 62	47, 197. 29	129, 259. 56	506, 053. 36
1921 ²	16, 792, 248. 32	12, 416, 878. 29	516, 051. 82	195, 275. 08	2, 873, 523. 01	-----	382, 034. 06	48, 735. 14	140, 983. 36	218, 767. 56
1920 ³	14, 658, 079. 92	10, 481, 790. 44	433, 337. 62	137, 230. 47	2, 807, 798. 73	-----	308, 629. 24	36, 471. 25	134, 720. 51	318, 101. 66
1919.....	14, 661, 560. 50	10, 649, 803. 53	493, 138. 35	133, 351. 26	2, 735, 151. 37	-----	263, 371. 74	19, 574. 36	185, 407. 12	181, 762. 77
1918.....	11, 302, 764. 75	8, 335, 805. 69	417, 264. 23	127, 128. 31	1, 830, 764. 70	-----	190, 267. 35	18, 246. 60	216, 040. 27	167, 247. 60
1917.....	6, 149, 619. 63	4, 490, 900. 05	230, 752. 18	68, 330. 02	1, 023, 405. 63	-----	144, 777. 26	6214. 88	87, 223. 27	98, 016. 34
1916.....	4, 864, 180. 94	3, 514, 061. 85	176, 793. 16	48, 709. 30	849, 259. 37	-----	98, 850. 56	4, 842. 21	95, 182. 98	76, 481. 51
1915.....	3, 597, 235. 85	2, 686, 923. 95	105, 526. 62	37, 437. 90	603, 432. 74	-----	72, 090. 72	9, 614. 79	63, 084. 01	19, 125. 12

¹ Prior to 1923, transportation of things was included in communication service.

² South Carolina failed to meet the full allotment to that State by \$0.95.

³ Pennsylvania failed to meet the full allotment to that State by \$67,234.37.

TABLE 14.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for year ended June 30, 1924, by projects

State	Total	Administra- tion	Printing and distri- bution of publica- tions	County agent work	Home demonstra- tion work ¹	Boys' and girls' club work	Home- economics special- ists ²	Exten- sion schools	Animal hus- bandry	Poultry	Dairying	Animal diseases	Agron- omy
Alabama	\$460, 641.27	\$17, 285.01	\$1, 709.41	\$234, 520.64	\$125, 823.74	\$10, 441.21	\$7, 665.25	\$2, 391.70	\$15, 482.47	\$375.86	\$217.25	-----	\$5, 875.51
Arizona	123, 193.38	12, 514.75	828.60	58, 922.38	17, 739.53	-----	-----	-----	5, 218.46	2, 350.44	2, 161.03	-----	2, 023.84
Arkansas	433, 867.87	33, 490.00	5, 462.77	206, 101.10	147, 576.26	-----	10, 707.08	661.89	1, 718.18	3, 949.60	5, 717.40	-----	-----
California	605, 309.80	16, 545.17	-----	373, 641.17	113, 224.61	28, 599.76	-----	-----	6, 753.10	8, 993.48	9, 374.82	-----	800.00
Colorado	215, 756.61	16, 300.76	8, 189.94	108, 758.60	7, 968.64	20, 648.72	9, 866.49	-----	6, 609.22	6, 482.28	770.70	-----	8, 216.71
Connecticut	251, 146.75	18, 393.96	6, 580.18	109, 050.91	10, 025.53	17, 506.65	15, 372.98	625.48	-----	11, 805.59	10, 103.68	-----	4, 941.87
Delaware	38, 123.00	6, 232.37	1, 137.97	15, 878.09	3, 497.41	10, 114.37	-----	-----	-----	-----	-----	-----	1, 018.45
Florida	253, 573.41	13, 967.25	2, 696.32	120, 114.38	86, 379.10	5, 391.05	3, 711.56	1, 785.20	-----	2, 708.58	4, 708.66	-----	-----
Georgia	580, 498.59	26, 478.99	6, 986.93	273, 305.29	155, 519.04	15, 929.93	6, 279.11	-----	6, 793.49	6, 901.76	8, 669.58	\$1, 596.67	9, 844.70
Idaho	183, 492.81	10, 072.94	6, 997.85	78, 637.84	22, 188.84	16, 061.19	3, 352.53	1, 557.35	10, 120.58	-----	7, 297.95	-----	13, 601.97
Illinois	1, 026, 935.47	14, 271.52	4, 310.22	839, 164.77	84, 984.68	10, 626.28	20, 628.38	-----	6, 963.12	2, 740.02	8, 843.76	2, 664.66	12, 861.00
Indiana	498, 551.63	25, 451.63	7, 018.91	283, 620.49	9, 411.57	42, 518.20	12, 047.30	10, 578.70	13, 684.24	12, 249.23	12, 886.14	2, 611.40	9, 558.28
Iowa	992, 500.33	60, 408.84	20, 969.29	630, 877.23	50, 551.24	30, 550.25	37, 764.70	6, 922.85	13, 147.31	15, 385.39	25, 094.48	4, 620.26	20, 722.16
Kansas	470, 532.99	21, 981.94	9, 196.71	257, 132.91	26, 171.15	11, 659.60	21, 177.17	43, 307.36	12, 752.03	7, 664.50	7, 431.57	2, 459.95	14, 827.25
Kentucky	463, 209.51	22, 419.50	4, 797.79	234, 793.25	74, 473.04	30, 048.70	15, 886.89	5, 237.81	15, 270.41	10, 738.65	7, 035.24	3, 691.45	9, 617.65
Louisiana	358, 619.16	33, 936.15	4, 329.33	197, 199.23	50, 780.01	14, 756.05	3, 535.38	-----	9, 707.67	9, 194.07	8, 879.22	3, 642.47	5, 981.36
Maine	160, 310.99	13, 897.42	1, 127.78	64, 792.26	47, 500.81	6, 673.39	5, 944.69	653.00	-----	3, 534.51	3, 382.81	-----	3, 882.66
Maryland	259, 795.15	23, 144.62	2, 997.18	114, 926.95	66, 707.07	8, 385.93	-----	5, 372.43	3, 763.38	3, 504.95	4, 195.78	-----	4, 331.35
Massachusetts	408, 814.15	14, 515.06	5, 898.91	123, 931.39	94, 905.76	109, 772.65	7, 952.75	10, 602.82	3, 709.48	5, 194.77	1, 605.34	-----	4, 774.48
Michigan	599, 360.55	21, 349.27	6, 239.71	350, 241.88	29, 724.06	65, 441.84	12, 575.10	3, 165.83	4, 674.03	8, 069.71	20, 520.71	-----	17, 697.16
Minnesota	441, 307.89	28, 960.19	10, 620.73	291, 954.74	15, 563.56	28, 372.95	10, 836.23	-----	8, 580.48	7, 454.87	15, 591.95	4, 068.71	3, 626.94
Mississippi	481, 479.55	20, 390.68	4, 519.04	227, 417.64	138, 897.64	24, 674.86	9, 490.59	-----	4, 500.12	4, 730.29	14, 574.65	-----	28, 694.88
Missouri	421, 644.08	20, 800.31	7, 755.86	220, 638.04	32, 452.72	11, 411.30	39, 205.80	642.73	11, 539.57	9, 150.59	12, 816.15	-----	10, 420.88
Montana	253, 499.16	21, 188.59	1, 970.58	130, 931.88	24, 818.34	18, 428.04	11, 311.43	2, 462.03	5, 604.62	4, 651.06	5, 724.78	-----	10, 000.58
Nebraska	326, 603.22	17, 196.67	3, 535.24	211, 941.71	10, 183.38	19, 614.47	16, 214.67	-----	5, 600.02	4, 937.58	3, 114.70	-----	5, 288.63
Nevada	96, 681.06	8, 804.81	-----	48, 394.67	24, 071.49	825.00	-----	-----	-----	703.39	2, 651.40	-----	-----
New Hampshire	128, 357.91	11, 170.55	5, 606.09	48, 052.98	30, 945.72	23, 527.47	-----	1, 336.20	-----	-----	3, 666.02	-----	-----
New Jersey	287, 034.98	19, 685.22	4, 151.42	108, 861.98	52, 985.57	51, 038.90	11, 925.08	-----	-----	9, 401.83	5, 720.05	-----	4, 676.76
New Mexico	153, 437.70	17, 010.83	1, 759.76	91, 979.26	15, 089.65	-----	2, 364.10	-----	3, 145.01	296.84	839.80	-----	4, 185.43
New York	1, 214, 341.12	91, 633.76	121, 609.44	457, 914.76	184, 992.09	92, 633.58	51, 992.34	53, 814.25	18, 567.98	17, 726.93	18, 134.47	-----	18, 395.39
North Carolina	579, 848.00	19, 708.86	12, 104.00	342, 919.55	119, 595.66	1, 200.00	-----	-----	32, 441.43	-----	5, 576.45	4, 473.25	15, 336.31
North Dakota	244, 596.98	14, 826.27	2, 469.35	145, 997.37	13, 181.19	9, 235.00	16, 945.76	-----	4, 419.14	4, 117.46	5, 214.81	-----	29, 847.44
Ohio	635, 688.14	46, 610.65	13, 393.27	295, 433.25	41, 269.65	60, 342.85	24, 571.65	7, 266.87	14, 465.38	9, 251.15	11, 399.12	-----	4, 068.72
Oklahoma	464, 007.97	27, 752.38	6, 584.18	228, 144.90	134, 880.23	13, 552.88	6, 850.86	-----	4, 404.78	7, 075.73	5, 283.84	-----	8, 824.09
Oregon	275, 223.39	32, 729.99	5, 497.69	112, 727.48	19, 119.63	38, 470.36	3, 195.31	-----	4, 483.42	4, 529.46	4, 592.65	-----	24, 412.41
Pennsylvania	658, 004.23	75, 027.65	3, 145.14	307, 218.99	19, 119.63	15, 908.22	79, 225.24	266.30	21, 558.37	19, 219.03	29, 742.07	-----	565.60
Rhode Island	31, 838.59	3, 613.10	432.00	14, 258.51	8, 103.50	4, 324.26	-----	-----	8, 692.74	5, 713.08	12, 205.11	-----	13, 900.69
South Carolina	414, 044.50	30, 814.24	7, 653.99	166, 598.56	118, 773.70	8, 294.40	6, 320.96	-----	8, 068.32	4, 507.24	4, 797.46	5, 019.57	13, 262.54
South Dakota	333, 828.75	25, 506.45	1, 708.16	212, 452.50	20, 307.37	3, 358.46	13, 287.77	-----	13, 322.51	4, 221.47	18, 440.91	-----	9, 090.53
Tennessee	427, 540.52	30, 433.39	8, 743.76	215, 755.99	89, 530.48	4, 796.93	9, 779.94	6, 627.36	-----	-----	-----	-----	-----

Texas-----	954,370.74	43,403.63	13,095.61	535,298.47	272,360.98	9,076.00	14,100.80	-----	10,196.40	7,523.90	6,036.58	-----	6,282.03
Utah-----	143,649.09	9,143.48	421.22	68,833.21	19,282.03	-----	7,251.28	-----	2,107.98	1,905.75	6,736.66	-----	9,473.94
Vermont-----	122,521.92	10,819.50	6,255.78	47,002.15	18,512.54	22,305.29	3,181.74	-----	-----	1,641.80	4,425.75	-----	2,828.28
Virginia-----	525,443.09	71,394.99	14,127.92	244,888.39	106,008.32	9,474.23	7,787.75	-----	8,941.19	12,841.29	10,658.86	-----	8,148.13
Washington-----	253,634.49	23,756.52	6,889.59	120,746.53	20,529.06	18,291.50	10,113.94	2,443.45	4,054.50	4,284.30	10,056.54	-----	4,055.49
West Virginia-----	301,808.55	22,711.32	8,292.97	137,253.75	48,632.47	30,897.24	-----	-----	7,755.28	7,766.31	5,542.84	1,912.70	4,920.04
Wisconsin-----	385,758.75	19,771.77	14,252.30	219,042.43	6,104.31	12,279.29	21,239.56	2,108.01	11,337.50	5,258.65	22,067.62	-----	18,690.76
Wyoming-----	141,597.25	14,260.48	1,550.22	71,001.03	19,926.00	4,031.20	3,590.30	-----	5,363.49	3,978.88	759.90	-----	8,285.17
Total, 1924-----	19,082,025.04	1,201,783.43	389,321.11	9,999,271.48	2,831,269.37	991,490.45	575,250.46	170,929.62	355,517.40	284,732.27	395,267.26	36,761.09	417,858.06
1923-----	18,484,845.00	1,226,809.21	332,987.35	9,625,817.43	2,790,419.11	991,179.78	502,968.18	144,970.45	338,874.66	270,060.32	369,724.59	54,798.23	388,279.58
1922-----	17,181,751.64	1,159,074.59	408,983.22	8,946,340.45	2,400,789.74	1,054,388.85	470,378.09	134,512.53	334,436.03	241,417.41	289,773.00	40,492.07	350,605.55
1921-----	16,792,248.32	1,147,756.66	382,034.06	8,911,965.32	2,388,473.21	923,982.19	300,146.47	147,183.19	300,270.51	209,454.02	323,182.77	36,532.87	281,547.94
1920-----	14,658,079.92	995,051.57	308,629.24	7,665,170.77	2,177,024.52	883,615.86	332,415.38	144,187.62	231,141.57	151,161.93	276,917.62	63,200.89	218,019.26
1919-----	14,661,560.50	930,658.24	263,616.98	7,124,500.90	2,889,210.50	921,621.38	-----	131,782.14	380,168.56	199,441.89	289,756.98	71,678.74	170,534.71
1918-----	11,302,764.75	754,175.86	207,478.99	5,604,962.72	2,226,227.97	609,666.18	-----	153,904.15	309,270.72	70,402.84	332,852.55	31,777.11	153,211.24
1917-----	6,149,619.63	512,891.54	137,647.87	3,058,640.94	741,679.89	319,556.91	-----	175,754.15	162,063.74	59,498.54	208,966.83	44,215.50	105,529.87
1916-----	4,864,180.94	445,243.67	99,779.68	2,411,539.81	519,866.99	231,227.16	-----	198,045.02	131,937.90	47,328.49	172,557.69	21,936.02	77,859.05
1915-----	3,498,815.35	295,308.48	71,597.65	1,902,230.51	319,822.50	162,448.27	-----	198,353.91	42,448.08	19,475.14	106,098.08	4,563.64	20,912.81

1 Prior to 1920, included home-economics specialists.

2 Prior to 1920, included under home demonstration work.

TABLE 14.—Total expenditures of funds from all sources for cooperative agricultural extension work in States for year ended June 30, 1924, by projects—Continued

State	Horti- culture	Botany and plant pathology	Entomol- ogy, api- culture, ornithol- ogy	Rodent pests	Forestry	Agri- cultural engi- neering	Farm manage- ment	Rural organiza- tion	Market- ing	Exhibits and fairs	Farmers' insti- tutes	Pub- licity	Miscella- neous specialists	Corre- spondence courses
Alabama	\$5,073.71	\$1,913.14	\$2,688.45			\$11,120.29	\$958.36		\$10,655.93	\$475.47		\$5,967.87		
Arizona	4,447.35			\$16,912.00					75.00					
Arkansas	4,335.33			2,643.68		151.96	1,746.94		9,605.68					
California	8,791.38			9,621.00		11,873.07	2,856.07		375.00	3,637.81			\$16,976.46	
Colorado				9,977.54		3,122.38	4,528.05		2,196.05	343.50			1,633.15	
Connecticut	12,432.16		2,422.23			2,441.84	6,482.01		8,767.64				7,584.82	
Delaware		244.34												
Florida		7,479.16				7.15			2,625.00	2,000.00				
Georgia	9,978.43					5,919.86			5,899.01	3,145.80			37,250.00	
Idaho	4,417.55		2,111.16	13,370.06		5.00								
Illinois	7,636.72					3,850.71	7,179.63		210.00					
Indiana	8,934.35	7,297.20	480.84			1,617.43	6,251.13		435.00		\$31,899.59			
Iowa	11,107.69	1,614.28	8,155.86		\$3,193.45	6,563.00	10,972.13	\$3,819.82	9,742.45	3,141.26			17,176.39	
Kansas	5,765.21	4,336.95	4,298.63	6,193.86		9,487.75	4,512.88		175.57					
Kentucky	8,479.88					5,689.55	5,246.30		9,783.40					
Louisiana	9,959.29		3,642.46		150.00				2,926.47					
Maine					2,876.97		6,044.69							
Maryland	8,951.41	4,449.60	6,423.81			10.85			2,629.84					
Massachusetts	15,490.69	15.35	17.08		.60		4,038.40		5,084.88	1,303.74				
Michigan	20,927.97		5,800.98			13,719.27	25.01		19,188.02					
Minnesota	260.57	3,680.41	259.28		318.17		3,616.99		3,174.43	1,000.00	3,366.69			
Mississippi	11,493.47					5,685.08			15,105.49					
Missouri	9,471.29		5,445.22			1,690.43		2,948.62	6,980.57					
Montana		696.63		6,338.00		8,775.00	8,077.30							
Nebraska	3,776.33					8,778.05	4,006.48	3,582.83	4,120.51					
Nevada				5,500.00					441.67					
New Hampshire							4,052.88							
New Jersey	13,727.83					14.95	4,530.39		315.00					
New Mexico	1,516.62			12,646.00					2,450.78				153.62	
New York	19,025.06	19,077.11	10,709.44		3,732.41	10,528.90	16,581.88	7,171.33	2,450.78					
North Carolina	10,295.32	3,647.90	6,328.62			5,425.99			100.00					
North Dakota		1,290.34							5,267.91			7,103.09		
Ohio	13,562.77	766.34	5,469.52	5,486.00		444.68	8,952.91		86.00	354.36				
Oklahoma	4,415.73		4,316.65	6,903.33		11,318.55	13,330.27		5,773.15		31,616.26			
Oregon	5,008.41			12,649.17		4,593.10			5,180.66					
Pennsylvania	15,909.44	15,566.36	19,194.43		8,657.39	4,311.11	5,444.21		6,278.57	7,361.84				
Rhode Island							10,173.56	12,779.63						
South Carolina		4,258.61	4,812.41				541.62							
South Dakota	8,776.78		4,264.35	5,185.00		4,879.19	3,961.51	1,458.58	15,770.65					

[illegible]

TABLE 15.—*Number of counties with men county extension agents*

State	Num- ber of counties ¹	July 1—										
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Alabama.....	67	67	67	65	62	66	65	55	55	55	54	59
Arizona.....	14	-----	3	6	7	11	11	10	9	11	11	10
Arkansas.....	75	45	52	53	61	68	66	58	44	40	47	45
California.....	58	4	11	13	17	33	35	35	37	40	41	40
Colorado.....	63	13	13	19	16	29	27	24	24	26	23	28
Connecticut.....	8	1	6	7	8	8	8	8	8	8	7	8
Delaware.....	3	-----	3	3	2	3	3	3	3	3	3	3
Florida.....	63	25	36	33	37	53	47	32	31	33	37	33
Georgia.....	160	80	81	83	117	120	134	97	85	98	88	89
Idaho.....	44	2	3	7	11	27	32	34	32	28	21	19
Illinois.....	102	14	18	20	22	53	63	81	85	85	94	95
Indiana.....	92	27	31	32	40	83	76	68	82	85	86	82
Iowa.....	99	9	11	16	26	97	99	99	99	99	99	98
Kansas.....	105	9	39	56	53	67	53	51	59	56	58	57
Kentucky.....	119	28	39	47	45	90	71	53	61	61	59	67
Louisiana.....	64	41	43	43	42	58	55	41	38	45	45	46
Maine.....	16	-----	3	4	9	16	16	16	16	16	16	16
Maryland.....	23	8	13	16	23	22	23	22	23	22	23	23
Massachusetts.....	14	1	10	9	11	13	13	11	11	11	11	12
Michigan.....	83	11	17	22	30	71	63	60	64	69	64	57
Minnesota.....	87	27	23	19	16	85	86	82	83	77	67	62
Mississippi.....	82	48	49	44	53	79	75	71	50	56	56	56
Missouri.....	114	13	15	14	15	71	52	47	58	55	54	53
Montana.....	55	4	8	7	12	23	24	27	26	26	24	23
Nebraska.....	93	5	8	9	8	79	54	39	46	42	42	41
Nevada.....	17	-----	-----	-----	6	8	4	6	7	9	11	11
New Hampshire.....	10	1	5	8	9	10	10	9	10	10	10	10
New Jersey.....	21	4	7	11	10	17	18	18	18	18	18	19
New Mexico.....	31	-----	8	9	11	25	26	22	19	18	22	20
New York.....	60	25	29	36	41	56	55	55	55	55	55	56
North Carolina.....	100	51	64	65	69	91	87	77	59	66	73	76
North Dakota.....	53	17	15	15	17	38	32	28	36	36	33	34
Ohio.....	88	8	10	12	20	63	65	63	80	83	85	81
Oklahoma.....	77	40	56	59	62	77	70	73	71	74	67	61
Oregon.....	36	10	12	13	14	24	23	26	26	24	22	21
Pennsylvania.....	67	10	14	22	45	53	40	54	57	63	60	63
Rhode Island.....	5	-----	-----	4	4	5	4	4	4	4	4	4
South Carolina.....	46	43	43	42	40	43	45	45	42	42	38	39
South Dakota.....	69	3	5	11	13	59	36	39	43	48	43	36
Tennessee.....	95	36	38	48	57	91	76	45	38	41	48	54
Texas.....	254	98	99	90	92	178	168	127	128	143	148	149
Utah.....	29	8	10	8	15	28	22	21	19	19	22	21
Vermont.....	14	7	9	11	13	13	13	12	13	13	11	13
Virginia.....	100	53	55	51	53	75	71	57	61	67	70	65
Washington.....	39	7	10	13	22	34	29	32	31	28	24	25
West Virginia.....	55	13	27	29	45	48	48	40	31	40	39	39
Wisconsin.....	71	9	12	13	22	59	41	42	50	50	47	47
Wyoming.....	22	3	6	8	13	15	13	14	16	16	16	18
Total.....	3,062	928	1,136	1,225	1,436	2,435	2,247	2,033	2,043	2,114	2,096	2,084

¹ Number of counties reporting agricultural products.

TABLE 16.—*Number of counties with women county extension agents*

State	Num- ber of count- ies ¹	July 1—										
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Alabama.....	67	18	19	27	28	67	54	32	36	34	34	35
Arizona.....	14					3	6	6	8	10	9	11
Arkansas.....	75	15	20	31	47	65	58	42	34	32	38	42
California.....	58					24	8	10	10	16	21	23
Colorado.....	63			2		7	3	2	1	2	2	4
Connecticut.....	8				5	8	6	6	3	5	6	6
Delaware.....	3				1	3	2					
Florida.....	63	24	27	28	35	54	42	29	28	29	24	31
Georgia.....	160	29	48	45	57	125	93	66	66	70	68	64
Idaho.....	44					24	4	5	5	21	30	30
Illinois.....	102			1		88	17	11	11	11	16	21
Indiana.....	92					22	8	5	3	2	2	1
Iowa.....	99					96	23	19	21	18	17	13
Kansas.....	105					14	8	9	7	8	9	10
Kentucky.....	119	9	19	24	27	96	74	18	19	26	24	24
Louisiana.....	64	13	13	18	20	33	32	24	25	26	28	28
Maine.....	16					14	2	5	10	14	15	15
Maryland.....	23	5	6	10	13	22	23	21	17	16	17	18
Massachusetts.....	14			1	6	12	10	9	9	11	9	10
Michigan.....	83			1	1	24	13	12	10	8	7	7
Minnesota.....	87					39	8	8	7	4	3	8
Mississippi.....	82	33	33	32	49	71	64	53	35	48	51	45
Missouri.....	114					48	20	11	14	13	8	11
Montana.....	55					18	11	9	7	11	7	5
Nebraska.....	93				2	30	10	7	7	3	3	2
Nevada.....	17			1		10	5	5	6	4	4	4
New Hampshire.....	10				2	9	6	3	5	6	8	7
New Jersey.....	21			1		8	5	8	7	9	8	12
New Mexico.....	31					11	5	4	4	2	4	4
New York.....	60			1	3	38	24	22	28	31	32	35
North Carolina.....	100	27	34	44	48	72	66	59	47	49	50	48
North Dakota.....	53				2	33	5	4	2	6	2	2
Ohio.....	88			1		13	5	2	7	10	8	11
Oklahoma.....	77	19	24	22	23	50	46	40	36	37	42	50
Oregon.....	36					15	5	5	6	4	4	3
Pennsylvania.....	67			1		48					28	28
Rhode Island.....	5					4		2	3	5	2	2
South Carolina.....	46	21	24	31	36	44	45	45	36	36	36	38
South Dakota.....	69					42	3	3	1	1	15	19
Tennessee.....	95	18	24	31	49	94	77	41	26	25	28	27
Texas.....	254	26	27	38	31	67	69	55	38	52	79	91
Utah.....	29			2	2	14	4	6	3	15	4	5
Vermont.....	14					7	5	4	6	9	10	9
Virginia.....	100	17	22	25	38	52	36	28	23	30	34	36
Washington.....	39					22	6	8	7	7	6	5
West Virginia.....	55	5	10	12	12	33	22	12	8	18	15	23
Wisconsin.....	71					17	4	2	1	1	1	1
Wyoming.....	22					5	7	7	6	6	6	6
Total.....	3,062	279	350	430	537	1,715	1,049	784	699	801	874	930

¹ Number of counties reporting agricultural products.

